

## Photometric Test Report

### IES FLOOD REPORT

PHOTOMETRIC FILENAME : L03121101.IES

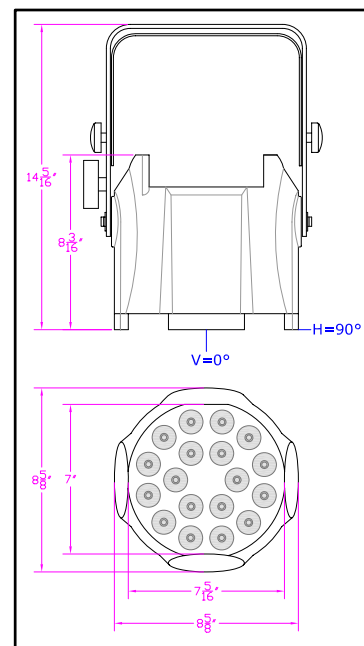
### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] L03121101  
[TESTLAB] LIGHT LABORATORY, INC.  
[ISSUE DATE] 3/22/2012  
[MANUFAC] ELATION LIGHTING  
[LUMCAT] OPTI QUAD PAR-RED  
[LUMINAIRE] 8-5/8"DIA. X 8-3/16"H. OPTI QUAD PAR10 LED FLOOD FIXTURE  
[MORE] 18 5W QUAD RGBW LEDS WITH 10 DEG. BEAM ANGLE OPTICS  
[MORE] TESTED WITH ONLY RED ON.  
[BALLASTCAT] N/A  
[BALLAST] 100-240VAC 47-63Hz ELECTRONIC  
[LAMPPOSITION] 0,0  
[LAMPCAT] 5W QUAD RGBW LED  
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
[\_INPUT] 120VAC, 33.93W  
[\_TEST PROCEDURE] IESNA:LM-79-08

Note: Candela values converted from Type-C to Type-B

### CHARACTERISTICS

NEMA Type	3 H x 3 V
Maximum Candela	2748
Maximum Candela Angle	-1H -5V
Horizontal Beam Angle (50%)	19.4
Vertical Beam Angle (50%)	21.5
Horizontal Field Angle (10%)	34.1
Vertical Field Angle (10%)	35.9
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	244
Beam Efficiency	N.A.
Field Lumens	364
Field Efficiency	N.A.
Spill Lumens	117
Luminaire Lumens	481
Total Efficiency	N.A.
Total Luminaire Watts	33.93
Ballast Factor	1.00

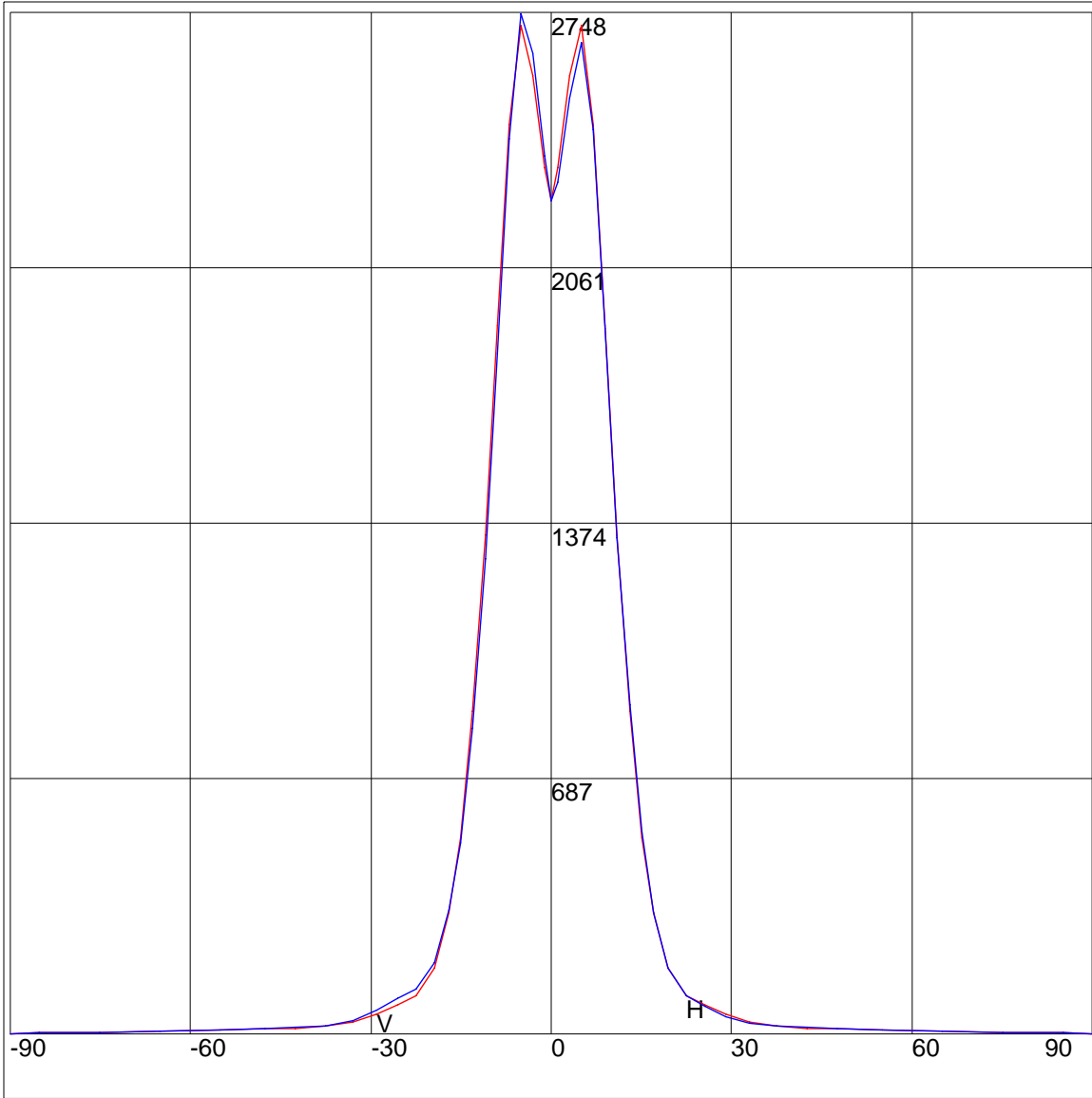


**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121101.IES**

**AXIAL CANDELA**

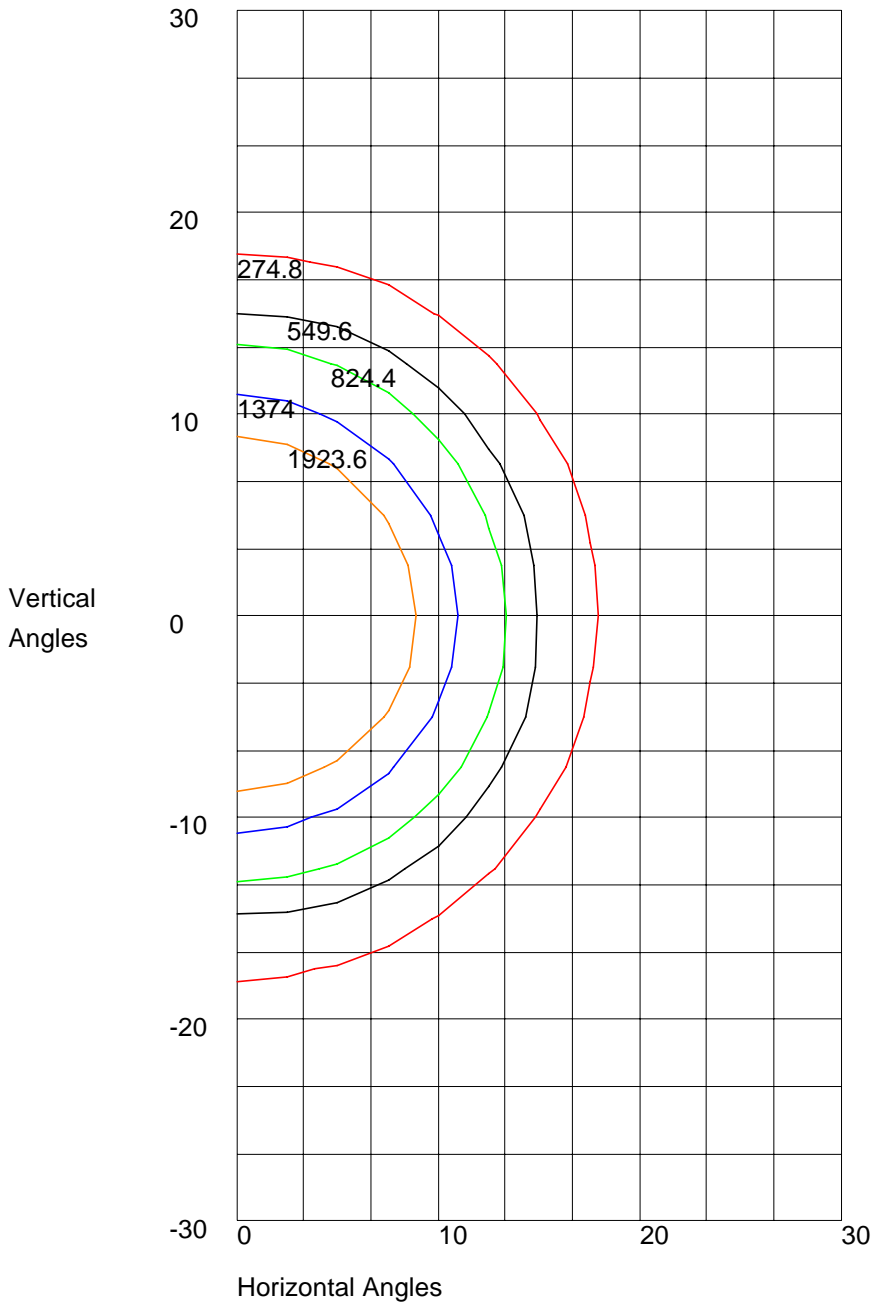
DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	6	85	6
75	6	75	6
65	7	65	7
55	11	55	12
47.5	16	47.5	17
42.5	17	42.5	18
37.5	22	37.5	22
33	32	33	31
29	54	29	49
25.5	80	25.5	75
22.5	106	22.5	105
19.5	179	19.5	178
17	328	17	329
15	529	15	547
13	867	13	887
11	1344	11	1336
9	1906	9	1897
7	2446	7	2432
5	2713	5	2668
3	2577	3	2517
1	2329	1	2290
0	2242	0	2242
-1	2329	-1	2363
-3	2577	-3	2640
-5	2713	-5	2745
-7	2446	-7	2409
-9	1906	-9	1833
-11	1344	-11	1281
-13	867	-13	823
-15	529	-15	514
-17	328	-17	333
-19.5	179	-19.5	194
-22.5	106	-22.5	122
-25.5	80	-25.5	97
-29	54	-29	64
-33	32	-33	36
-37.5	22	-37.5	24
-42.5	17	-42.5	18
-47.5	16	-47.5	16
-55	11	-55	11
-65	7	-65	8
-75	6	-75	6
-85	6	-85	6
-90	0	-90	0

AXIAL CANDELA DISPLAY



Maximum Candela = 2748 Located At Horizontal Angle =-1, Vertical Angle =-5  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 2748 Located At Horizontal Angle =-1, Vertical Angle =-5  
50% Maximum Candela = 1374  
10% Maximum Candela = 274.8

## Photometric Test Report

### IES FLOOD REPORT

PHOTOMETRIC FILENAME : L03121102.IES

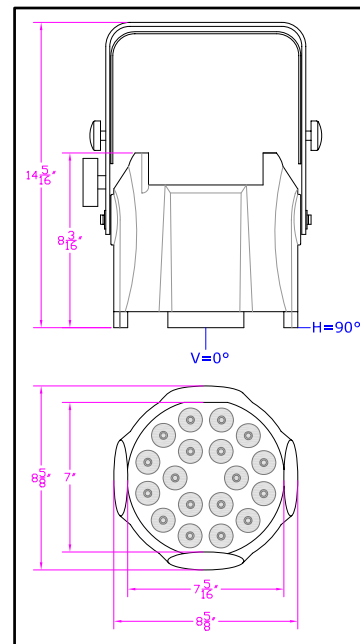
### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] L03121102  
[TESTLAB] LIGHT LABORATORY, INC.  
[ISSUE DATE] 3/26/2012  
[MANUFAC] ELATION LIGHTING  
[LUMCAT] OPTI QUAD PAR-GREEN  
[LUMINAIRE] 8-5/8"DIA. X 8-3/16"H. OPTI QUAD PAR10 LED FLOOD FIXTURE  
[MORE] 18 5W QUAD RGBW LEDS WITH 10 DEG. BEAM ANGLE OPTICS  
[MORE] TESTED WITH ONLY GREEN ON.  
[BALLASTCAT] N/A  
[BALLAST] 100-240VAC 47-63Hz ELECTRONIC  
[LAMPPOSITION] 0,0  
[LAMPCAT] 5W QUAD RGBW LED  
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
[\_INPUT] 120VAC, 43.63W  
[\_TEST PROCEDURE] IESNA:LM-79-08

Note: Candela values converted from Type-C to Type-B

### CHARACTERISTICS

NEMA Type	3 H x 3 V
Maximum Candela	6036
Maximum Candela Angle	-1H 5V
Horizontal Beam Angle (50%)	20.3
Vertical Beam Angle (50%)	22.2
Horizontal Field Angle (10%)	35.9
Vertical Field Angle (10%)	36.9
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	554
Beam Efficiency	N.A.
Field Lumens	846
Field Efficiency	N.A.
Spill Lumens	255
Luminaire Lumens	1100
Total Efficiency	N.A.
Total Luminaire Watts	43.63
Ballast Factor	1.00

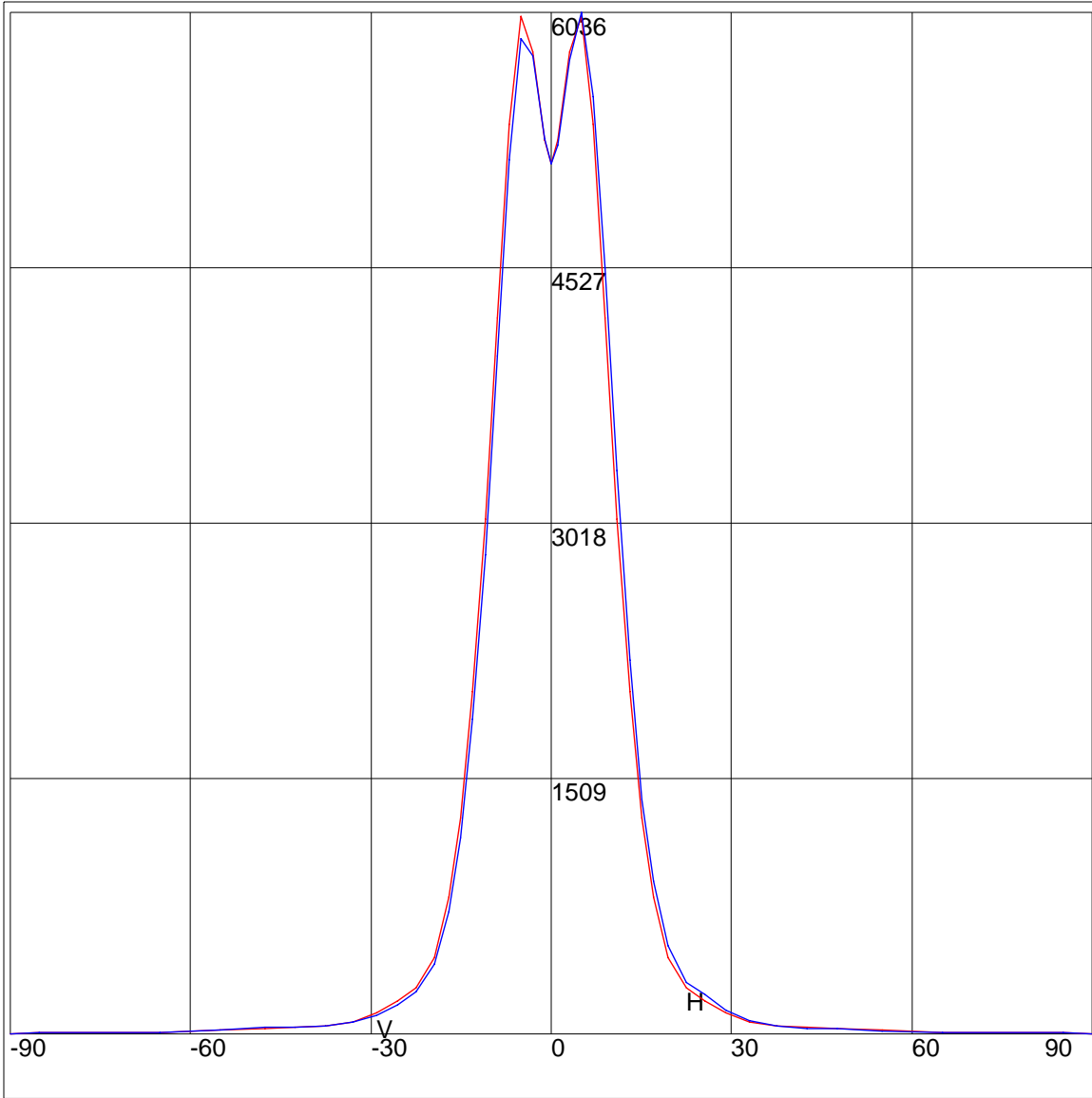


**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121102.IES**

**AXIAL CANDELA**

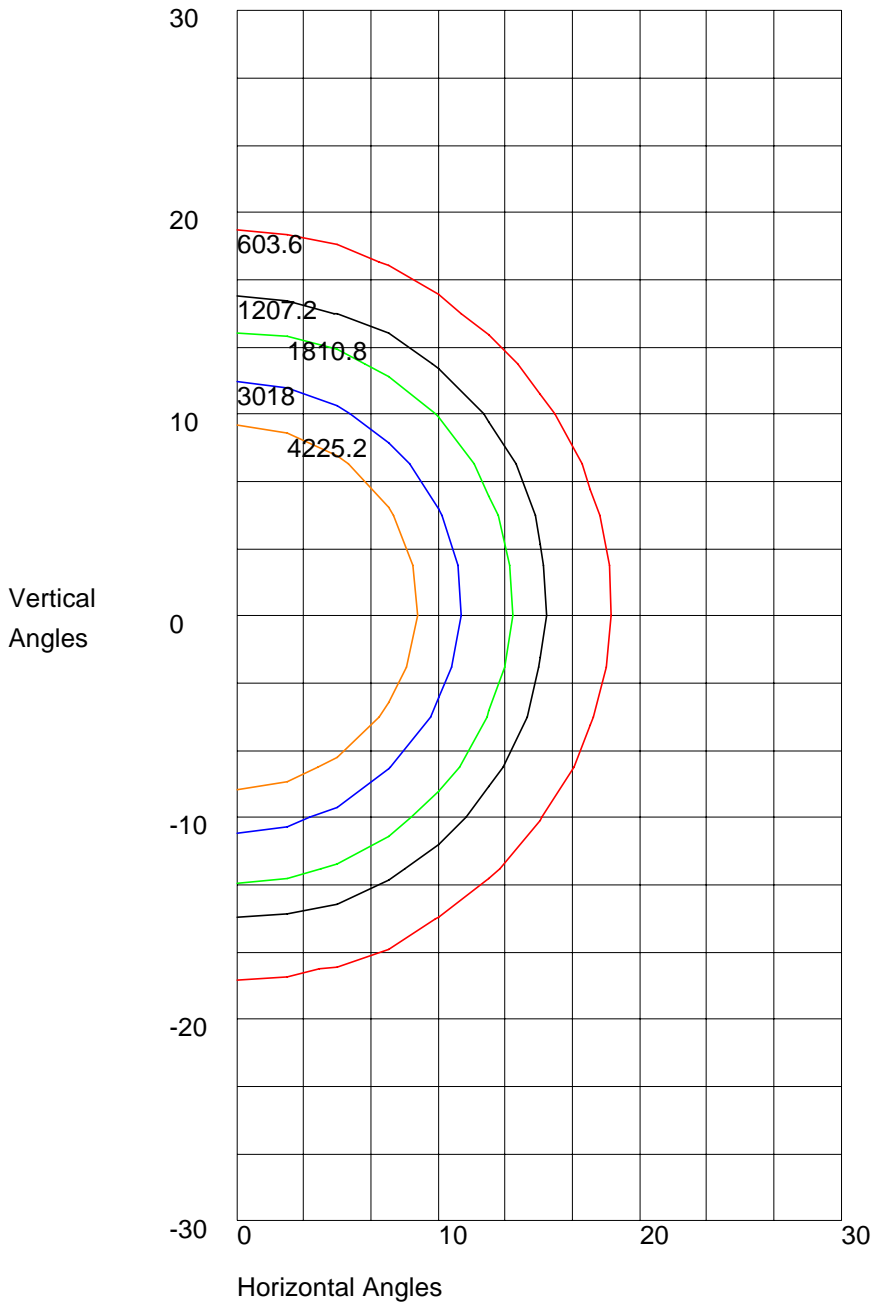
DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	10	85	10
75	11	75	11
65	15	65	14
55	25	55	23
47.5	37	47.5	33
42.5	39	42.5	38
37.5	50	37.5	53
33	74	33	83
29	125	29	144
25.5	200	25.5	234
22.5	274	22.5	306
19.5	454	19.5	521
17	811	17	906
15	1277	15	1389
13	2021	13	2213
11	3042	11	3332
9	4234	9	4525
7	5379	7	5540
5	6015	5	6033
3	5802	3	5759
1	5280	1	5253
0	5141	0	5141
-1	5280	-1	5289
-3	5802	-3	5780
-5	6015	-5	5883
-7	5379	-7	5164
-9	4234	-9	4008
-11	3042	-11	2833
-13	2021	-13	1860
-15	1277	-15	1162
-17	811	-17	728
-19.5	454	-19.5	419
-22.5	274	-22.5	250
-25.5	200	-25.5	177
-29	125	-29	113
-33	74	-33	71
-37.5	50	-37.5	50
-42.5	39	-42.5	41
-47.5	37	-47.5	43
-55	25	-55	25
-65	15	-65	15
-75	11	-75	12
-85	10	-85	10
-90	0	-90	0

AXIAL CANDELA DISPLAY



Maximum Candela = 6036 Located At Horizontal Angle = -1, Vertical Angle = 5  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 6036 Located At Horizontal Angle = -1, Vertical Angle = 5  
50% Maximum Candela = 3018  
10% Maximum Candela = 603.6



## Photometric Test Report

### IES FLOOD REPORT

PHOTOMETRIC FILENAME : L03121103.IES

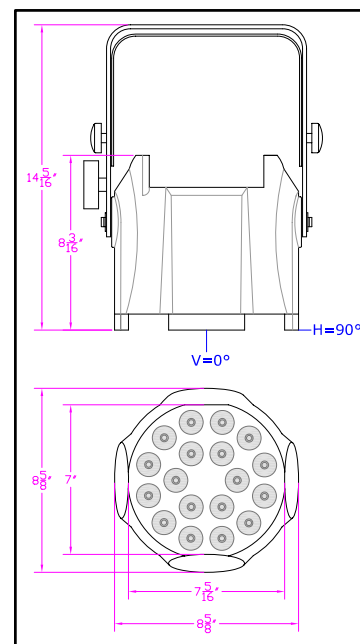
### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] L03121103  
[TESTLAB] LIGHT LABORATORY, INC.  
[ISSUE DATE] 3/26/2012  
[MANUFAC] ELATION LIGHTING  
[LUMCAT] OPTI QUAD PAR-BLUE  
[LUMINAIRE] 8-5/8"DIA. X 8-3/16"H. OPTI QUAD PAR10 LED FLOOD FIXTURE  
[MORE] 18 5W QUAD RGBW LEDS WITH 10 DEG. BEAM ANGLE OPTICS  
[MORE] TESTED WITH ONLY BLUE ON.  
[BALLASTCAT] N/A  
[BALLAST] 100-240VAC 47-63Hz ELECTRONIC  
[LAMPPOSITION] 0,0  
[LAMPCAT] 5W QUAD RGBW LED  
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
[\_INPUT] 120VAC, 42.27W  
[\_TEST PROCEDURE] IESNA:LM-79-08

Note: Candela values converted from Type-C to Type-B

### CHARACTERISTICS

NEMA Type	3 H x 3 V
Maximum Candela	1726
Maximum Candela Angle	-5H 1V
Horizontal Beam Angle (50%)	21.1
Vertical Beam Angle (50%)	18.9
Horizontal Field Angle (10%)	36.0
Vertical Field Angle (10%)	34.3
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	148
Beam Efficiency	N.A.
Field Lumens	225
Field Efficiency	N.A.
Spill Lumens	71
Luminaire Lumens	297
Total Efficiency	N.A.
Total Luminaire Watts	42.27
Ballast Factor	1.00

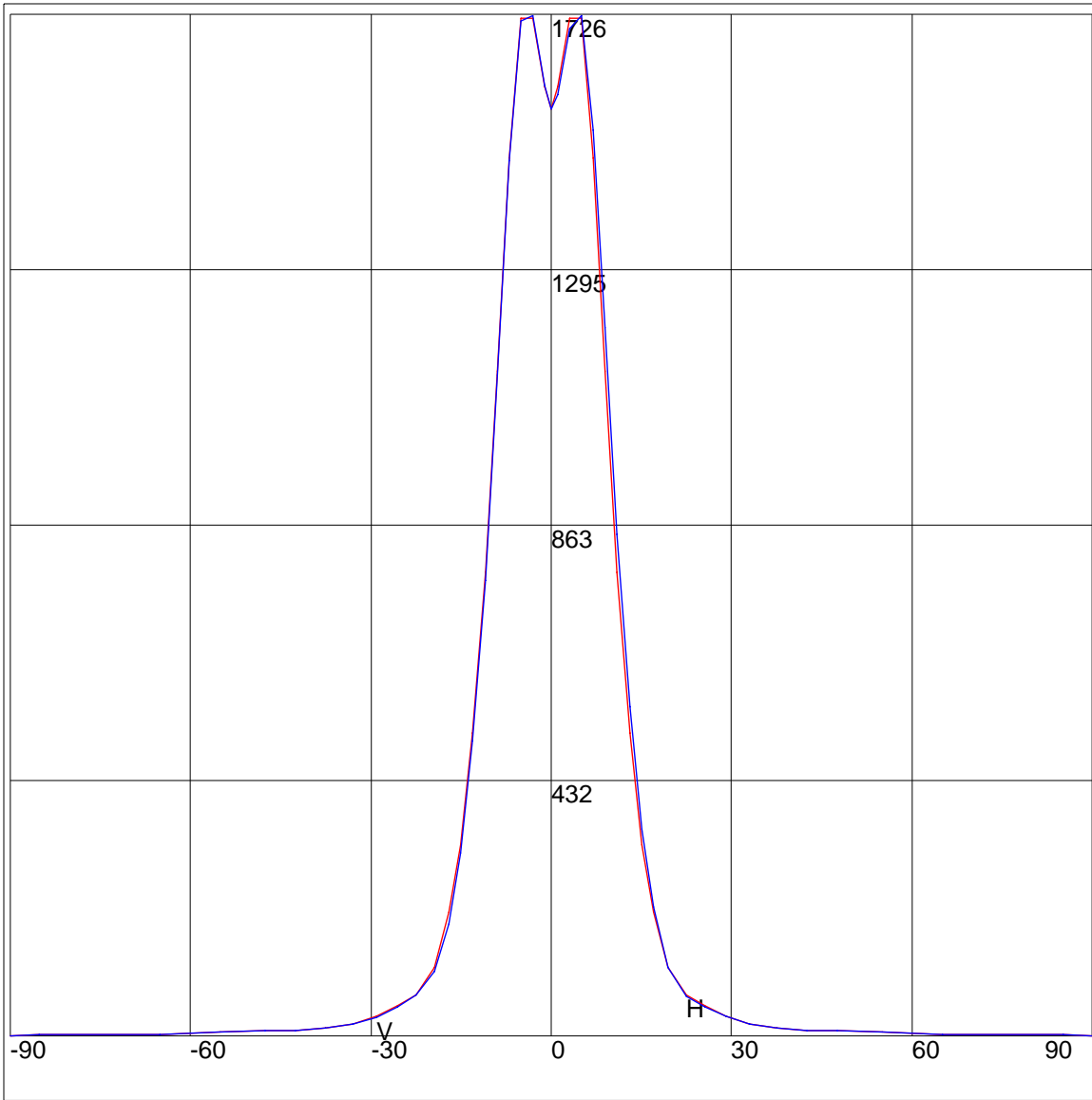


**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121103.IES**

**AXIAL CANDELA**

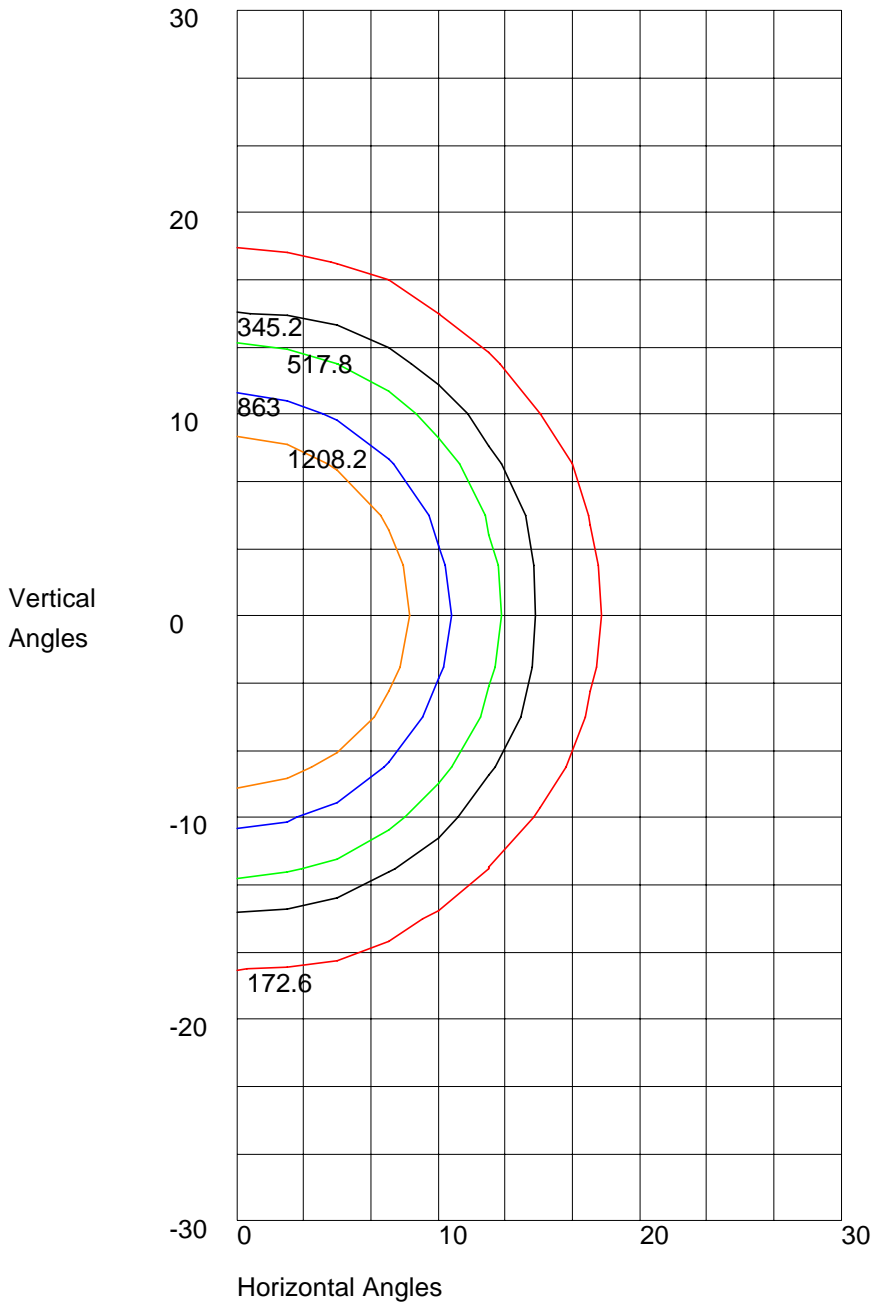
DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	3	85	3
75	3	75	3
65	4	65	4
55	7	55	7
47.5	10	47.5	9
42.5	10	42.5	10
37.5	14	37.5	14
33	21	33	21
29	35	29	35
25.5	53	25.5	49
22.5	71	22.5	67
19.5	117	19.5	117
17	209	17	219
15	324	15	349
13	512	13	557
11	784	11	849
9	1124	9	1196
7	1484	7	1530
5	1719	5	1723
3	1719	3	1702
1	1603	1	1590
0	1567	0	1567
-1	1603	-1	1607
-3	1719	-3	1723
-5	1719	-5	1715
-7	1484	-7	1480
-9	1124	-9	1118
-11	784	-11	771
-13	512	-13	500
-15	324	-15	309
-17	209	-17	190
-19.5	117	-19.5	109
-22.5	71	-22.5	69
-25.5	53	-25.5	51
-29	35	-29	33
-33	21	-33	20
-37.5	14	-37.5	14
-42.5	10	-42.5	10
-47.5	10	-47.5	10
-55	7	-55	7
-65	4	-65	4
-75	3	-75	3
-85	3	-85	3
-90	0	-90	0

AXIAL CANDELA DISPLAY



Maximum Candela = 1726 Located At Horizontal Angle = -5, Vertical Angle = 1  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 1726 Located At Horizontal Angle = -5, Vertical Angle = 1  
50% Maximum Candela = 863  
10% Maximum Candela = 172.6

## Photometric Test Report

### IES FLOOD REPORT

PHOTOMETRIC FILENAME : L03121104.IES

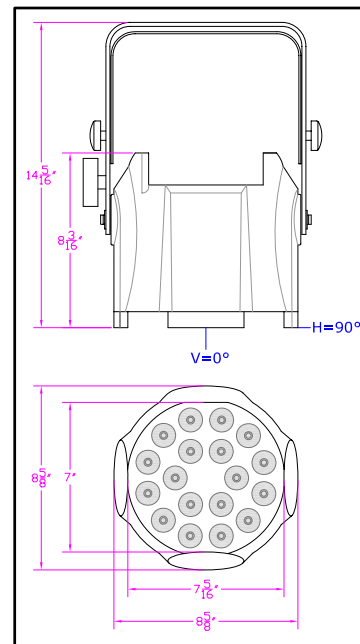
### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] L03121104  
[TESTLAB] LIGHT LABORATORY, INC.  
[ISSUE DATE] 3/26/2012  
[MANUFAC] ELATION LIGHTING  
[LUMCAT] OPTI QUAD PAR-WHITE  
[LUMINAIRE] 8-5/8"DIA. X 8-3/16"H. OPTI QUAD PAR10 LED FLOOD FIXTURE  
[MORE] 18 5W QUAD RGBW LEDS WITH 10 DEG. BEAM ANGLE OPTICS  
[MORE] TESTED WITH ONLY WHITE ON.  
[BALLASTCAT] N/A  
[BALLAST] 100-240VAC 47-63Hz ELECTRONIC  
[LAMPPOSITION] 0,0  
[LAMP CAT] 5W QUAD RGBW LED  
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
[\_INPUT] 120VAC, 42.17W  
[\_TEST PROCEDURE] IESNA:LM-79-08

Note: Candela values converted from Type-C to Type-B

### CHARACTERISTICS

NEMA Type	3 H x 3 V
Maximum Candela	8961
Maximum Candela Angle	0H -3V
Horizontal Beam Angle (50%)	21.0
Vertical Beam Angle (50%)	21.7
Horizontal Field Angle (10%)	37.0
Vertical Field Angle (10%)	37.4
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	808
Beam Efficiency	N.A.
Field Lumens	1261
Field Efficiency	N.A.
Spill Lumens	390
Luminaire Lumens	1651
Total Efficiency	N.A.
Total Luminaire Watts	42.17
Ballast Factor	1.00



**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121104.IES**

**AXIAL CANDELA**

DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	16	85	16
75	18	75	17
65	22	65	22
55	35	55	38
47.5	55	47.5	59
42.5	58	42.5	63
37.5	80	37.5	85
33	124	33	123
29	213	29	207
25.5	317	25.5	312
22.5	430	22.5	431
19.5	721	19.5	726
17	1271	17	1247
15	1969	15	1894
13	2976	13	2908
11	4364	11	4343
9	6061	9	6142
7	7727	7	7786
5	8722	5	8644
3	8843	3	8617
1	8505	1	8320
0	8382	0	8382
-1	8505	-1	8605
-3	8843	-3	8961
-5	8722	-5	8806
-7	7727	-7	7743
-9	6061	-9	6098
-11	4364	-11	4392
-13	2976	-13	2983
-15	1969	-15	1964
-17	1271	-17	1289
-19.5	721	-19.5	729
-22.5	430	-22.5	437
-25.5	317	-25.5	330
-29	213	-29	209
-33	124	-33	121
-37.5	80	-37.5	81
-42.5	58	-42.5	58
-47.5	55	-47.5	55
-55	35	-55	36
-65	22	-65	24
-75	18	-75	19
-85	16	-85	16
-90	0	-90	0

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121104.IES**

**CANDELA TABULATION**

Maximum Candela = 8961  
 Beam Edge = 4480.5 Cd (50% of Max.)  
 Field Edge = 896.1 Cd (10% of Max.)  
 \* Indicates Values Inside Field Edge

Vert. Angles	Horizontal Angles									
	<u>-90.0</u>	<u>-85.0</u>	<u>-75.0</u>	<u>-65.0</u>	<u>-55.0</u>	<u>-47.5</u>	<u>-42.5</u>	<u>-37.5</u>	<u>-33.0</u>	<u>-29.0</u>
90.0	0	0	0	0	0	0	0	0	0	0
85.0	0	1	4	7	9	11	12	13	13	14
75.0	0	4	12	16	17	17	17	17	18	18
65.0	0	7	16	17	18	19	20	20	21	21
55.0	0	9	17	18	20	22	23	26	28	30
47.5	0	11	17	19	22	26	29	33	36	39
42.5	0	12	17	20	23	29	33	37	42	47
37.5	0	13	17	20	25	32	37	43	49	52
33.0	0	13	18	21	27	34	42	49	52	55
29.0	0	14	18	21	29	37	46	52	55	64
25.5	0	14	18	21	30	40	49	53	62	73
22.5	0	15	18	22	31	43	51	55	68	87
19.5	0	15	18	22	32	45	53	59	74	101
17.0	0	15	18	22	32	47	54	63	83	113
15.0	0	15	18	22	33	48	54	66	91	129
13.0	0	16	18	22	33	50	55	69	98	146
11.0	0	16	18	22	34	51	56	72	104	162
9.0	0	16	18	22	34	52	56	74	110	176
7.0	0	16	18	22	34	53	57	76	115	188
5.0	0	16	18	22	35	54	57	78	118	198
3.0	0	16	18	22	35	55	58	79	121	206
1.0	0	16	18	22	35	55	58	80	124	212
0.0	0	16	18	22	35	55	58	80	124	213
-1.0	0	16	18	22	35	55	58	80	123	212
-3.0	0	16	18	22	35	55	58	79	121	206
-5.0	0	16	18	22	35	54	58	78	118	198
-7.0	0	16	18	22	35	54	58	77	114	187
-9.0	0	16	18	22	35	53	58	75	110	175
-11.0	0	16	18	22	34	53	57	73	104	161
-13.0	0	16	18	22	34	52	57	71	98	145
-15.0	0	15	18	22	34	50	57	68	92	128
-17.0	0	15	18	22	33	49	56	65	85	113
-19.5	0	15	18	22	33	47	56	62	77	102
-22.5	0	15	18	22	32	45	55	58	71	89
-25.5	0	14	18	21	31	42	53	57	65	76
-29.0	0	14	18	21	29	39	49	56	58	67
-33.0	0	13	18	21	28	36	44	53	56	58
-37.5	0	13	17	20	26	33	38	46	52	55
-42.5	0	12	17	20	23	30	34	39	44	49
-47.5	0	11	17	19	22	26	30	33	36	40
-55.0	0	9	17	18	20	22	23	26	28	30
-65.0	0	7	16	17	18	19	20	21	21	22
-75.0	0	4	12	16	17	17	17	18	18	18
-85.0	0	1	4	7	9	11	12	13	13	14
-90.0	0	0	0	0	0	0	0	0	0	0

IES FLOOD REPORT  
 PHOTOMETRIC FILENAME : L03121104.IES

CANDELA TABULATION - (Cont.)

Vert. Angles	Horizontal Angles									
	<u>-25.5</u>	<u>-22.5</u>	<u>-19.5</u>	<u>-17.0</u>	<u>-15.0</u>	<u>-13.0</u>	<u>-11.0</u>	<u>-9.0</u>	<u>-7.0</u>	<u>-5.0</u>
90.0	0	0	0	0	0	0	0	0	0	0
85.0	14	15	15	15	15	16	16	16	16	16
75.0	18	18	18	18	18	18	17	17	17	17
65.0	21	21	21	22	22	22	22	22	22	22
55.0	32	33	34	35	36	36	37	37	38	38
47.5	43	46	49	51	53	54	55	56	57	58
42.5	51	55	56	58	59	59	60	61	61	62
37.5	55	57	62	66	70	73	76	78	80	82
33.0	62	69	76	85	93	100	106	111	115	119
29.0	72	86	101	113	129	145	160	173	184	193
25.5	91	106	137	164	184	209	235	258	277	293
22.5	108	141	178	218	251	284	323	362	391	412
19.5	138	180	232	278	333	386	448	542	617	671
17.0	166	220	280	351	411	538	656	796	970 *	1102 *
15.0	187	252	331	410	550	687	928 *	1160 *	1410 *	1648 *
13.0	212	283	381	535	687	975 *	1272 *	1677 *	2060 *	2472 *
11.0	236	318	438	651	930 *	1276 *	1780 *	2352 *	2937 *	3590 *
9.0	259	352	530	793	1169 *	1691 *	2361 *	3141 *	4067 *	4953 *
7.0	278	381	605	975 *	1432 *	2088 *	2949 *	4074 *	5296 *	6398 *
5.0	294	403	663	1115 *	1685 *	2504 *	3609 *	4959 *	6389 *	7707 *
3.0	306	419	701	1213 *	1862 *	2799 *	4083 *	5644 *	7183 *	8248 *
1.0	315	429	722	1270 *	1967 *	2973 *	4362 *	6058 *	7711 *	8687 *
0.0	317	430	721	1271 *	1969 *	2976 *	4364 *	6061 *	7727 *	8722 *
-1.0	315	429	719	1270 *	1969 *	2976 *	4363 *	6056 *	7723 *	8748 *
-3.0	307	419	694	1210 *	1867 *	2807 *	4085 *	5638 *	7203 *	8347 *
-5.0	295	404	653	1109 *	1689 *	2516 *	3616 *	4953 *	6379 *	7743 *
-7.0	279	382	596	963 *	1432 *	2101 *	2963 *	4073 *	5276 *	6371 *
-9.0	260	354	523	777	1164 *	1699 *	2375 *	3152 *	4066 *	4933 *
-11.0	236	321	436	639	920 *	1274 *	1792 *	2376 *	2966 *	3608 *
-13.0	211	286	381	528	676	969 *	1274 *	1700 *	2103 *	2521 *
-15.0	186	255	333	408	544	677	922 *	1166 *	1433 *	1691 *
-17.0	166	221	284	351	408	530	644	784	969 *	1116 *
-19.5	139	180	235	283	335	384	441	531	605	662
-22.5	109	142	179	220	256	290	327	363	391	412
-25.5	93	108	138	165	186	211	239	264	286	304
-29.0	76	89	102	113	128	145	160	173	185	195
-33.0	65	72	78	86	93	99	105	109	113	117
-37.5	57	59	63	67	70	73	75	77	79	80
-42.5	53	55	56	57	58	58	58	59	59	58
-47.5	43	45	48	49	51	52	53	53	54	54
-55.0	31	32	33	34	34	35	35	35	36	36
-65.0	22	23	23	23	24	24	24	24	24	24
-75.0	18	19	19	19	19	19	19	19	19	19
-85.0	14	15	15	15	15	16	16	16	16	16
-90.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	Horizontal Angles									
	<u>-3.0</u>	<u>-1.0</u>	<u>0.0</u>	<u>1.0</u>	<u>3.0</u>	<u>5.0</u>	<u>7.0</u>	<u>9.0</u>	<u>11.0</u>	<u>13.0</u>
90.0	0	0	0	0	0	0	0	0	0	0
85.0	16	16	16	16	16	16	16	16	16	16
75.0	17	17	17	17	17	17	17	17	17	18
65.0	22	22	22	22	22	22	22	22	22	22



**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121104.IES**

**CANDELA TABULATION - (Cont.)**

55.0	38	38	38	38	38	38	38	37	37	36
47.5	59	59	59	59	59	58	57	56	55	54
42.5	62	63	63	63	62	62	61	61	60	59
37.5	83	85	85	85	83	82	80	78	76	73
33.0	121	123	123	123	121	119	115	111	106	100
29.0	201	206	207	206	201	193	184	173	160	145
25.5	304	311	312	311	304	293	277	258	235	209
22.5	425	432	431	432	425	412	391	362	323	284
19.5	707	727	726	727	707	671	617	542	448	386
17.0	1194 *	1247 *	1247 *	1247 *	1194 *	1102 *	970 *	796	656	538
15.0	1810 *	1898 *	1894 *	1898 *	1810 *	1648 *	1410 *	1160 *	928 *	687
13.0	2756 *	2915 *	2908 *	2915 *	2756 *	2472 *	2060 *	1677 *	1272 *	975 *
11.0	4060 *	4342 *	4343 *	4342 *	4060 *	3590 *	2937 *	2352 *	1780 *	1276 *
9.0	5657 *	6120 *	6142 *	6120 *	5657 *	4953 *	4067 *	3141 *	2361 *	1691 *
7.0	7228 *	7771 *	7786 *	7771 *	7228 *	6398 *	5296 *	4074 *	2949 *	2088 *
5.0	8258 *	8640 *	8644 *	8640 *	8258 *	7707 *	6389 *	4959 *	3609 *	2504 *
3.0	8641 *	8629 *	8617 *	8629 *	8641 *	8248 *	7183 *	5644 *	4083 *	2799 *
1.0	8752 *	8455 *	8320 *	8455 *	8752 *	8687 *	7711 *	6058 *	4362 *	2973 *
0.0	8843 *	8505 *	8382 *	8505 *	8843 *	8722 *	7727 *	6061 *	4364 *	2976 *
-1.0	8888 *	8674 *	8605 *	8674 *	8888 *	8748 *	7723 *	6056 *	4363 *	2976 *
-3.0	8857 *	8952 *	8961 *	8952 *	8857 *	8347 *	7203 *	5638 *	4085 *	2807 *
-5.0	8364 *	8805 *	8806 *	8805 *	8364 *	7743 *	6379 *	4953 *	3616 *	2516 *
-7.0	7210 *	7742 *	7743 *	7742 *	7210 *	6371 *	5276 *	4073 *	2963 *	2101 *
-9.0	5621 *	6074 *	6098 *	6074 *	5621 *	4933 *	4066 *	3152 *	2375 *	1699 *
-11.0	4079 *	4378 *	4392 *	4378 *	4079 *	3608 *	2966 *	2376 *	1792 *	1274 *
-13.0	2813 *	2983 *	2983 *	2983 *	2813 *	2521 *	2103 *	1700 *	1274 *	969 *
-15.0	1867 *	1965 *	1964 *	1965 *	1867 *	1691 *	1433 *	1166 *	922 *	677
-17.0	1221 *	1285 *	1289 *	1285 *	1221 *	1116 *	969 *	784	644	530
-19.5	702	727	729	727	702	662	605	531	441	384
-22.5	427	436	437	436	427	412	391	363	327	290
-25.5	318	328	330	328	318	304	286	264	239	211
-29.0	202	208	209	208	202	195	185	173	160	145
-33.0	119	121	121	121	119	117	113	109	105	99
-37.5	81	81	81	81	81	80	79	77	75	73
-42.5	58	58	58	58	58	58	59	59	58	58
-47.5	55	55	55	55	55	54	54	53	53	52
-55.0	36	36	36	36	36	36	36	35	35	35
-65.0	24	24	24	24	24	24	24	24	24	24
-75.0	19	19	19	19	19	19	19	19	19	19
-85.0	16	16	16	16	16	16	16	16	16	16
-90.0	0	0	0	0	0	0	0	0	0	0

**Vert. Angles**      **Horizontal Angles**

	<u>15.0</u>	<u>17.0</u>	<u>19.5</u>	<u>22.5</u>	<u>25.5</u>	<u>29.0</u>	<u>33.0</u>	<u>37.5</u>	<u>42.5</u>	<u>47.5</u>
90.0	0	0	0	0	0	0	0	0	0	0
85.0	15	15	15	15	14	14	13	13	12	11
75.0	18	18	18	18	18	18	18	17	17	17
65.0	22	22	21	21	21	21	21	20	20	19
55.0	36	35	34	33	32	30	28	26	23	22
47.5	53	51	49	46	43	39	36	33	29	26
42.5	59	58	56	55	51	47	42	37	33	29
37.5	70	66	62	57	55	52	49	43	37	32
33.0	93	85	76	69	62	55	52	49	42	34
29.0	129	113	101	86	72	64	55	52	46	37
25.5	184	164	137	106	91	73	62	53	49	40

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121104.IES**

**CANDELA TABULATION - (Cont.)**

22.5	251	218	178	141	108	87	68	55	51	43
19.5	333	278	232	180	138	101	74	59	53	45
17.0	411	351	280	220	166	113	83	63	54	47
15.0	550	410	331	252	187	129	91	66	54	48
13.0	687	535	381	283	212	146	98	69	55	50
11.0	930 *	651	438	318	236	162	104	72	56	51
9.0	1169 *	793	530	352	259	176	110	74	56	52
7.0	1432 *	975 *	605	381	278	188	115	76	57	53
5.0	1685 *	1115 *	663	403	294	198	118	78	57	54
3.0	1862 *	1213 *	701	419	306	206	121	79	58	55
1.0	1967 *	1270 *	722	429	315	212	124	80	58	55
0.0	1969 *	1271 *	721	430	317	213	124	80	58	55
-1.0	1969 *	1270 *	719	429	315	212	123	80	58	55
-3.0	1867 *	1210 *	694	419	307	206	121	79	58	55
-5.0	1689 *	1109 *	653	404	295	198	118	78	58	54
-7.0	1432 *	963 *	596	382	279	187	114	77	58	54
-9.0	1164 *	777	523	354	260	175	110	75	58	53
-11.0	920 *	639	436	321	236	161	104	73	57	53
-13.0	676	528	381	286	211	145	98	71	57	52
-15.0	544	408	333	255	186	128	92	68	57	50
-17.0	408	351	284	221	166	113	85	65	56	49
-19.5	335	283	235	180	139	102	77	62	56	47
-22.5	256	220	179	142	109	89	71	58	55	45
-25.5	186	165	138	108	93	76	65	57	53	42
-29.0	128	113	102	89	76	67	58	56	49	39
-33.0	93	86	78	72	65	58	56	53	44	36
-37.5	70	67	63	59	57	55	52	46	38	33
-42.5	58	57	56	55	53	49	44	39	34	30
-47.5	51	49	48	45	43	40	36	33	30	26
-55.0	34	34	33	32	31	30	28	26	23	22
-65.0	24	23	23	23	22	22	21	21	20	19
-75.0	19	19	19	19	18	18	18	18	17	17
-85.0	15	15	15	15	14	14	13	13	12	11
-90.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	Horizontal Angles				
	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>	<u>85.0</u>	<u>90.0</u>
90.0	0	0	0	0	0
85.0	9	7	4	1	0
75.0	17	16	12	4	0
65.0	18	17	16	7	0
55.0	20	18	17	9	0
47.5	22	19	17	11	0
42.5	23	20	17	12	0
37.5	25	20	17	13	0
33.0	27	21	18	13	0
29.0	29	21	18	14	0
25.5	30	21	18	14	0
22.5	31	22	18	15	0
19.5	32	22	18	15	0
17.0	32	22	18	15	0
15.0	33	22	18	15	0
13.0	33	22	18	16	0
11.0	34	22	18	16	0
9.0	34	22	18	16	0

IES FLOOD REPORT  
PHOTOMETRIC FILENAME : L03121104.IES

CANDELA TABULATION - (Cont.)

7.0	34	22	18	16	0
5.0	35	22	18	16	0
3.0	35	22	18	16	0
1.0	35	22	18	16	0
0.0	35	22	18	16	0
-1.0	35	22	18	16	0
-3.0	35	22	18	16	0
-5.0	35	22	18	16	0
-7.0	35	22	18	16	0
-9.0	35	22	18	16	0
-11.0	34	22	18	16	0
-13.0	34	22	18	16	0
-15.0	34	22	18	15	0
-17.0	33	22	18	15	0
-19.5	33	22	18	15	0
-22.5	32	22	18	15	0
-25.5	31	21	18	14	0
-29.0	29	21	18	14	0
-33.0	28	21	18	13	0
-37.5	26	20	17	13	0
-42.5	23	20	17	12	0
-47.5	22	19	17	11	0
-55.0	20	18	17	9	0
-65.0	18	17	16	7	0
-75.0	17	16	12	4	0
-85.0	9	7	4	1	0
-90.0	0	0	0	0	0

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121104.IES**

**LUMEN TABULATION**

Average Of Right And Left Sides

Total Luminaire Lumens (one side of beam only) = 825.36

Total Field Lumens (one side of beam only) = 630.32

\* Indicates Values Inside Field Edge

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>1</u>	<u>3</u>	<u>5</u>	<u>7</u>	<u>9</u>	<u>11</u>	<u>13</u>	<u>15</u>	<u>17</u>
90										
85	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
75	0.05	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.12
65	0.06	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.14
55	0.09	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.20
47.5	0.11	0.22	0.22	0.22	0.22	0.21	0.21	0.20	0.20	0.23
42.5	0.09	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.19
37.5	0.11	0.22	0.22	0.22	0.22	0.21	0.21	0.20	0.19	0.22
33	0.14	0.28	0.28	0.27	0.27	0.26	0.25	0.24	0.22	0.24
29	0.20	0.40	0.39	0.37	0.37	0.35	0.33	0.30	0.28	0.27
25.5	0.28	0.54	0.53	0.50	0.50	0.47	0.43	0.39	0.34	0.33
22.5	0.34	0.67	0.65	0.62	0.62	0.58	0.53	0.47	0.41	0.38
19.5	0.53	1.05	1.01	0.95	0.95	0.87	0.75	0.64	0.56	0.49
17	0.75 *	1.47 *	1.40 *	1.27	1.27	1.10	0.92	0.76	0.62	0.52
15	0.96 *	1.87 *	1.75 *	1.55 *	1.55 *	1.31 *	1.06	0.84	0.65	0.50
13	1.46 *	2.86 *	2.64 *	2.30 *	2.30 *	1.90 *	1.51 *	1.15 *	0.86	0.64
11	2.21 *	4.28 *	3.91 *	3.35 *	3.35 *	2.72 *	2.12 *	1.58 *	1.14 *	0.82
9	3.19 *	6.14 *	5.55 *	4.71 *	4.71 *	3.77 *	2.89 *	2.12 *	1.50 *	1.04
7	4.24 *	8.15 *	7.36 *	6.27 *	6.27 *	5.00 *	3.76 *	2.71 *	1.89 *	1.28 *
5	5.00 *	9.71 *	8.99 *	7.81 *	7.81 *	6.25 *	4.68 *	3.32 *	2.28 *	1.52 *
3	5.26 *	10.40 *	9.98 *	8.94 *	8.94 *	7.29 *	5.49 *	3.87 *	2.62 *	1.72 *
1	5.18 *	10.50 *	10.43 *	9.64 *	9.64 *	8.02 *	6.04 *	4.24 *	2.84 *	1.85 *
0	2.56 *	5.26 *	5.32 *	4.98 *	4.98 *	4.16 *	3.13 *	2.19 *	1.46 *	0.95 *
-1	2.60 *	5.31 *	5.35 *	4.99 *	4.99 *	4.16 *	3.13 *	2.19 *	1.46 *	0.95 *
-3	5.36 *	10.77 *	10.59 *	9.70 *	9.70 *	8.03 *	6.04 *	4.24 *	2.84 *	1.85 *
	5.41 *	10.65 *	10.12 *	8.99 *	8.99 *	7.29 *	5.49 *	3.88 *	2.62 *	1.72 *

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121104.IES**

**LUMENS TABULATION - (Cont.)**

<b>-5</b>	5.04 *	9.78 *	9.02 *	7.81 *	6.24 *	4.68 *	3.34 *	2.29 *	1.52 *	1.20
<b>-7</b>	4.21 *	8.11 *	7.33 *	6.25 *	5.00 *	3.77 *	2.72 *	1.89 *	1.27 *	1.03
<b>-9</b>	3.19 *	6.13 *	5.54 *	4.72 *	3.79 *	2.91 *	2.13 *	1.49 *	1.02	0.86
<b>-11</b>	2.24 *	4.34 *	3.96 *	3.39 *	2.76 *	2.14 *	1.58 *	1.13 *	0.81	0.72
<b>-13</b>	1.51 *	2.93 *	2.70 *	2.35 *	1.93 *	1.52 *	1.14 *	0.85	0.63	0.60
<b>-15</b>	0.99 *	1.93 *	1.79 *	1.58 *	1.31 *	1.05	0.83	0.64	0.50	0.50
<b>-17</b>	0.77 *	1.50 *	1.41 *	1.27	1.09	0.90	0.74	0.61	0.50	0.52
<b>-19.5</b>	0.53	1.05	1.00	0.94	0.86	0.75	0.64	0.56	0.48	0.50
<b>-22.5</b>	0.35	0.69	0.67	0.63	0.59	0.54	0.48	0.42	0.36	0.38
<b>-25.5</b>	0.29	0.56	0.54	0.51	0.48	0.44	0.39	0.35	0.30	0.33
<b>-29</b>	0.20	0.40	0.38	0.37	0.35	0.33	0.30	0.27	0.25	0.27
<b>-33</b>	0.14	0.28	0.27	0.27	0.26	0.25	0.24	0.22	0.21	0.24
<b>-37.5</b>	0.11	0.21	0.21	0.21	0.21	0.20	0.20	0.19	0.18	0.22
<b>-42.5</b>	0.09	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.19
<b>-47.5</b>	0.10	0.21	0.21	0.20	0.20	0.20	0.20	0.19	0.18	0.22
<b>-55</b>	0.09	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.20
<b>-65</b>	0.07	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.15
<b>-75</b>	0.05	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.12
<b>-85</b>	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
<b>-90</b>										
<b>Total</b>	66.18	130.10	122.94	109.38	90.22	69.83	51.63	37.24	26.68	23.51

**Vert. Horizontal Angles**

<b>Angles</b>	<b>19.5</b>	<b>22.5</b>	<b>25.5</b>	<b>29</b>	<b>33</b>	<b>37.5</b>	<b>42.5</b>	<b>47.5</b>	<b>55</b>	<b>65</b>
<b>90</b>	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.04	0.03	0.01
<b>85</b>	0.14	0.14	0.15	0.16	0.17	0.17	0.15	0.19	0.19	0.10
<b>75</b>	0.17	0.16	0.18	0.20	0.21	0.22	0.20	0.25	0.26	0.16
<b>65</b>	0.23	0.22	0.25	0.26	0.27	0.26	0.23	0.28	0.28	0.18
<b>55</b>	0.26	0.24	0.26	0.26	0.26	0.24	0.20	0.24	0.23	0.14
<b>47.5</b>	0.22	0.20	0.21	0.21	0.21	0.19	0.16	0.18	0.16	0.09

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121104.IES**

**LUMENS TABULATION - (Cont.)**

<b>42.5</b>	0.25	0.23	0.24	0.25	0.24	0.22	0.18	0.19	0.17	0.10
<b>37.5</b>	0.25	0.23	0.24	0.24	0.24	0.22	0.18	0.19	0.16	0.09
<b>33</b>	0.28	0.24	0.24	0.24	0.23	0.22	0.17	0.18	0.15	0.08
<b>29</b>	0.32	0.26	0.25	0.23	0.22	0.20	0.16	0.17	0.13	0.07
<b>25.5</b>	0.36	0.28	0.26	0.23	0.20	0.18	0.15	0.15	0.12	0.06
<b>22.5</b>	0.47	0.35	0.31	0.26	0.21	0.19	0.16	0.16	0.12	0.06
<b>19.5</b>	0.49	0.37	0.31	0.24	0.20	0.17	0.13	0.14	0.10	0.05
<b>17</b>	0.46	0.34	0.28	0.22	0.17	0.14	0.11	0.11	0.08	0.04
<b>15</b>	0.53	0.39	0.32	0.24	0.18	0.14	0.11	0.12	0.08	0.04
<b>13</b>	0.61	0.44	0.36	0.27	0.19	0.15	0.11	0.12	0.08	0.04
<b>11</b>	0.70	0.49	0.39	0.29	0.20	0.15	0.12	0.12	0.09	0.04
<b>9</b>	0.80	0.53	0.43	0.31	0.21	0.15	0.12	0.12	0.09	0.04
<b>7</b>	0.88	0.57	0.45	0.32	0.22	0.16	0.12	0.13	0.09	0.04
<b>5</b>	0.93	0.59	0.48	0.34	0.22	0.16	0.12	0.13	0.09	0.04
<b>3</b>	0.97	0.61	0.49	0.35	0.23	0.16	0.12	0.13	0.09	0.04
<b>1</b>	0.49	0.31	0.25	0.18	0.11	0.08	0.06	0.06	0.04	0.02
<b>0</b>	0.49	0.31	0.25	0.18	0.11	0.08	0.06	0.06	0.04	0.02
<b>-1</b>	0.96	0.61	0.49	0.35	0.23	0.16	0.12	0.13	0.09	0.04
<b>-3</b>	0.93	0.59	0.48	0.34	0.22	0.16	0.12	0.13	0.09	0.04
<b>-5</b>	0.87	0.57	0.45	0.32	0.22	0.16	0.12	0.13	0.09	0.04
<b>-7</b>	0.79	0.53	0.43	0.31	0.21	0.16	0.12	0.13	0.09	0.04
<b>-9</b>	0.70	0.49	0.39	0.29	0.20	0.15	0.12	0.13	0.09	0.04
<b>-11</b>	0.61	0.44	0.36	0.27	0.19	0.15	0.12	0.12	0.09	0.04
<b>-13</b>	0.54	0.39	0.32	0.24	0.18	0.15	0.12	0.12	0.09	0.04
<b>-15</b>	0.47	0.35	0.28	0.22	0.17	0.14	0.11	0.12	0.08	0.04
<b>-17</b>	0.49	0.37	0.31	0.25	0.20	0.17	0.14	0.14	0.10	0.05
<b>-19.5</b>	0.47	0.36	0.31	0.27	0.22	0.20	0.16	0.17	0.12	0.06
<b>-22.5</b>	0.36	0.28	0.26	0.24	0.21	0.20	0.16	0.16	0.12	0.06

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121104.IES**

**LUMENS TABULATION - (Cont.)**

<b>-25.5</b>	0.33	0.27	0.26	0.24	0.23	0.22	0.17	0.18	0.14	0.07
<b>-29</b>	0.29	0.25	0.25	0.25	0.25	0.24	0.18	0.19	0.15	0.08
<b>-33</b>	0.26	0.24	0.25	0.26	0.26	0.24	0.18	0.20	0.16	0.09
<b>-37.5</b>	0.25	0.23	0.25	0.26	0.25	0.23	0.18	0.20	0.17	0.10
<b>-42.5</b>	0.22	0.20	0.22	0.22	0.21	0.20	0.16	0.18	0.16	0.09
<b>-47.5</b>	0.25	0.24	0.26	0.26	0.26	0.24	0.20	0.24	0.23	0.14
<b>-55</b>	0.24	0.23	0.25	0.26	0.27	0.26	0.23	0.28	0.28	0.18
<b>-65</b>	0.18	0.17	0.19	0.21	0.22	0.22	0.20	0.25	0.26	0.16
<b>-75</b>	0.15	0.14	0.15	0.16	0.17	0.17	0.15	0.19	0.19	0.10
<b>-85</b>	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.04	0.03	0.01
<b>-90</b>	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.04	0.03	0.01
<b>Total</b>	19.69	14.52	12.82	10.74	8.97	7.75	6.24	6.91	5.65	3.10

<b>Vert. Angles</b>	<b>Horizontal Angles</b>			<b>Total</b>
	<b>75</b>	<b>85</b>	<b>90</b>	
<b>90</b>	0.00	0.00	0.55	
<b>85</b>	0.03	0.00	2.56	
<b>75</b>	0.05	0.00	3.21	
<b>65</b>	0.06	0.00	4.23	
<b>55</b>	0.05	0.00	4.39	
<b>47.5</b>	0.04	0.00	3.56	
<b>42.5</b>	0.04	0.00	4.08	
<b>37.5</b>	0.04	0.00	4.47	
<b>33</b>	0.03	0.00	5.20	
<b>29</b>	0.03	0.00	6.17	
<b>25.5</b>	0.03	0.00	7.03	
<b>22.5</b>	0.03	0.00	9.64	
<b>19.5</b>	0.02	0.00	11.52	
<b>17</b>	0.02	0.00	12.96	
<b>15</b>	0.02	0.00	18.10	

IES FLOOD REPORT  
PHOTOMETRIC FILENAME : L03121104.IES

LUMENS TABULATION - (Cont.)

13			
	0.02	0.00	25.26
11			
	0.02	0.00	34.38
9			
	0.02	0.00	44.52
7			
	0.02	0.00	53.76
5			
	0.02	0.00	60.02
3			
	0.02	0.00	63.35
1			
	0.01	0.00	32.34
0			
	0.01	0.00	32.47
-1			
	0.02	0.00	64.03
-3			
	0.02	0.00	60.61
-5			
	0.02	0.00	53.89
-7			
	0.02	0.00	44.41
-9			
	0.02	0.00	34.40
-11			
	0.02	0.00	25.48
-13			
	0.02	0.00	18.36
-15			
	0.02	0.00	13.12
-17			
	0.02	0.00	11.56
-19.5			
	0.03	0.00	9.69
-22.5			
	0.03	0.00	7.18
-25.5			
	0.03	0.00	6.33
-29			
	0.03	0.00	5.29
-33			
	0.04	0.00	4.54
-37.5			
	0.04	0.00	4.10
-42.5			
	0.04	0.00	3.52
-47.5			
	0.05	0.00	4.29
-55			
	0.06	0.00	4.25
-65			
	0.05	0.00	3.35
-75			
	0.03	0.00	2.62

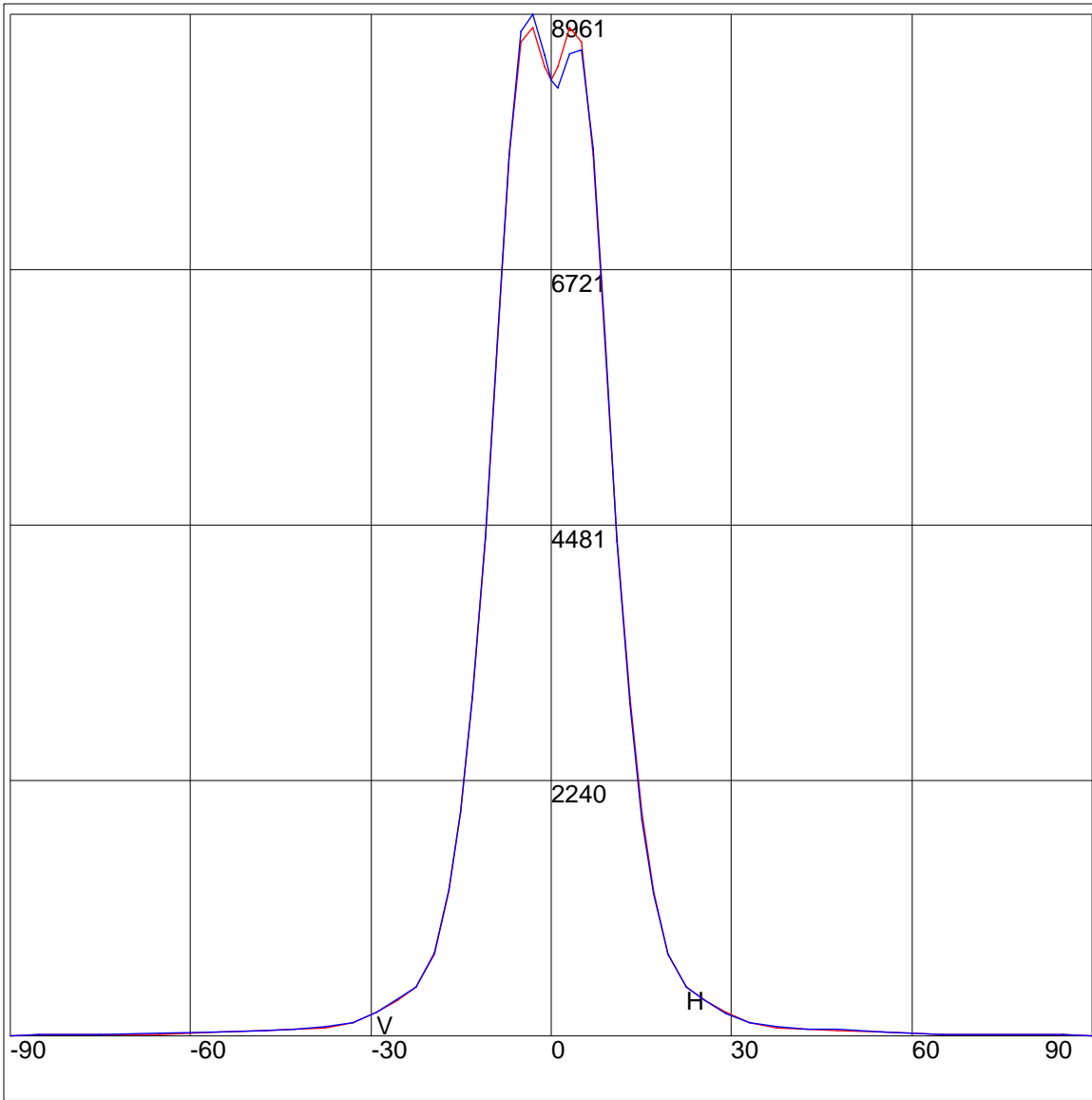


**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121104.IES**

**LUMENS TABULATION - (Cont.)**

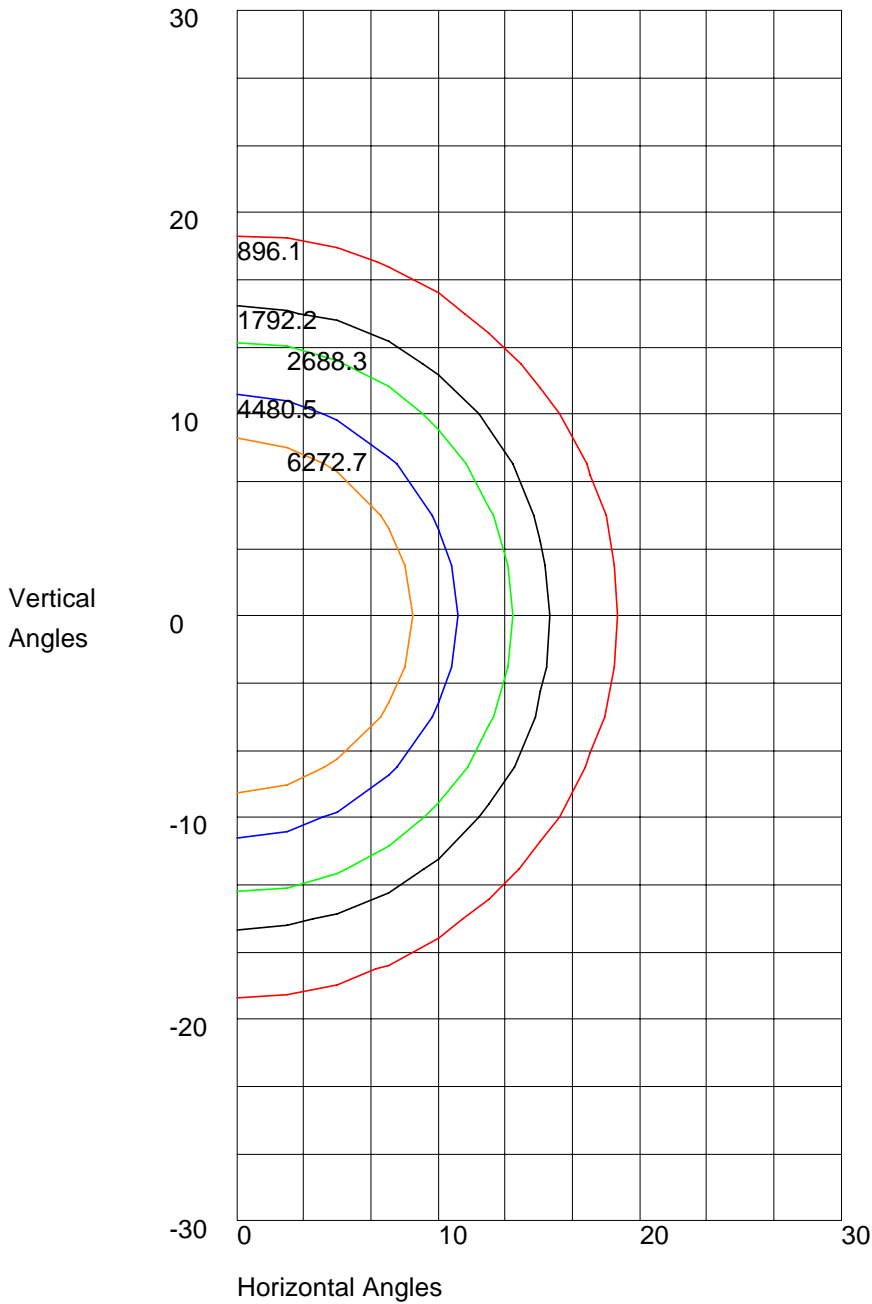
<b>-85</b>	0.00	0.00	0.55
<b>-90</b>			
<b>Total</b>	1.20	0.06	825.36

AXIAL CANDELA DISPLAY



Maximum Candela = 8961 Located At Horizontal Angle = 0, Vertical Angle = -3  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 8961 Located At Horizontal Angle = 0, Vertical Angle = -3  
50% Maximum Candela = 4480.5  
10% Maximum Candela = 896.1

## Photometric Test Report

### IES FLOOD REPORT

PHOTOMETRIC FILENAME : L03121105.IES

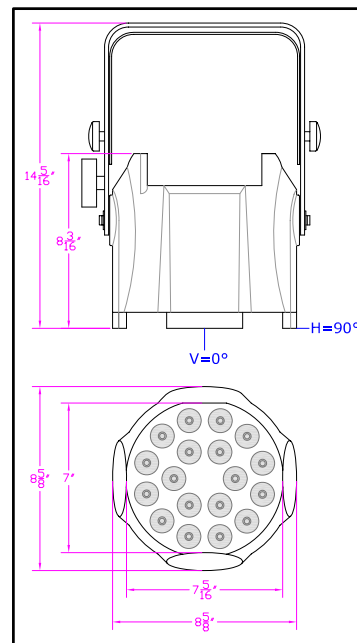
### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] L03121105  
[TESTLAB] LIGHT LABORATORY, INC.  
[ISSUEDATE] 3/26/2012  
[MANUFAC] ELATION LIGHTING  
[LUMCAT] OPTI QUAD PAR-FULL ON  
[LUMINAIRE] 8-5/8"DIA. X 8-3/16"H. OPTI QUAD PAR10 LED FLOOD FIXTURE  
[MORE] 18 5W QUAD RGBW LEDS WITH 10 DEG. BEAM ANGLE OPTICS  
[MORE] TESTED WITH FULL ON.  
[BALLASTCAT] N/A  
[BALLAST] 100-240VAC 47-63Hz ELECTRONIC  
[LAMPPOSITION] 0,0  
[LAMPCAT] 5W QUAD RGBW LED  
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
[\_INPUT] 120VAC, 131.90W  
[\_TEST PROCEDURE] IESNA:LM-79-08

Note: Candela values converted from Type-C to Type-B

### CHARACTERISTICS

NEMA Type	3 H x 3 V
Maximum Candela	16879
Maximum Candela Angle	0H -5V
Horizontal Beam Angle (50%)	19.8
Vertical Beam Angle (50%)	22.0
Horizontal Field Angle (10%)	35.5
Vertical Field Angle (10%)	36.7
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	1546
Beam Efficiency	N.A.
Field Lumens	2332
Field Efficiency	N.A.
Spill Lumens	700
Luminaire Lumens	3032
Total Efficiency	N.A.
Total Luminaire Watts	131.9
Ballast Factor	1.00

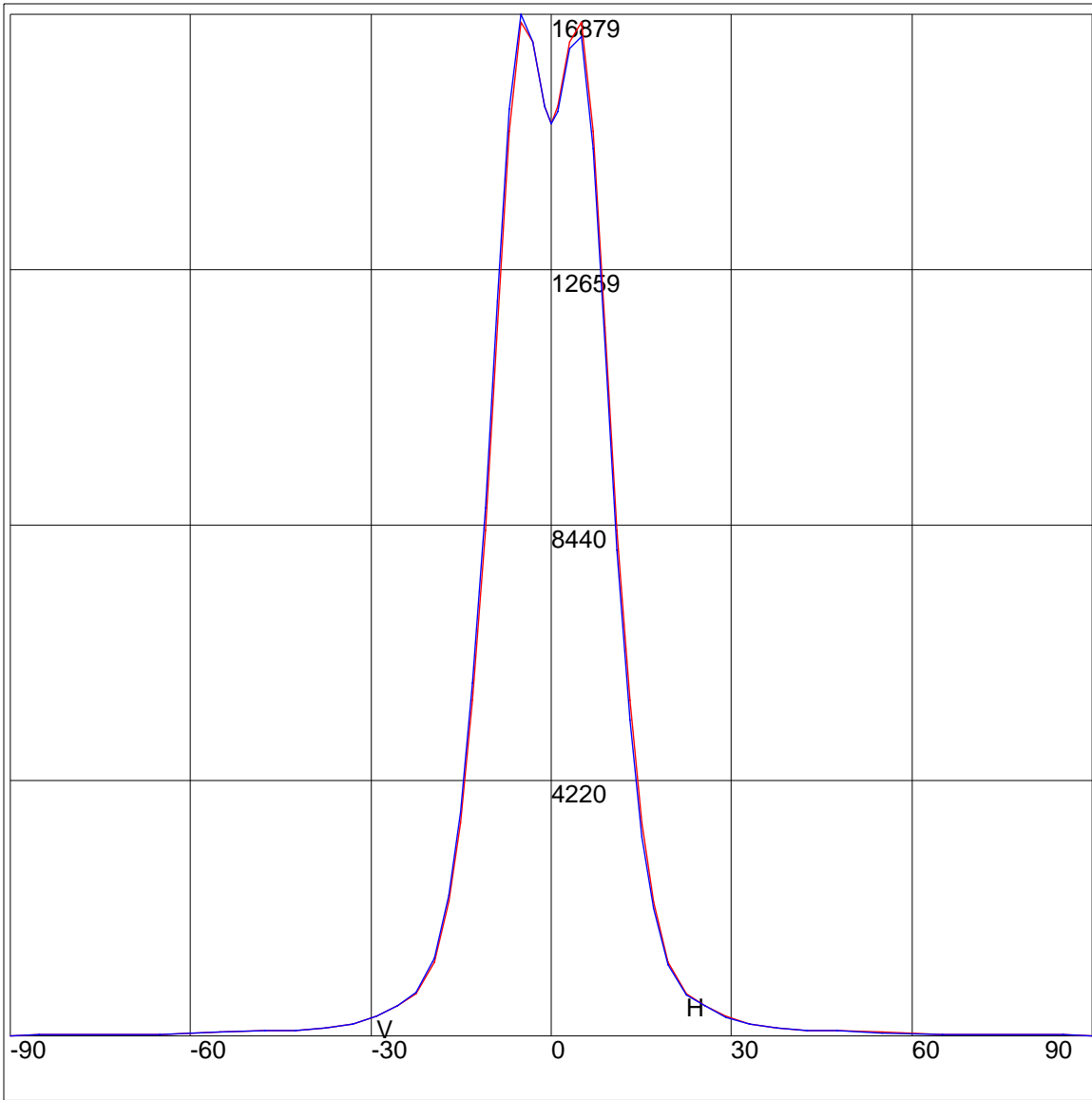


**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : L03121105.IES**

**AXIAL CANDELA**

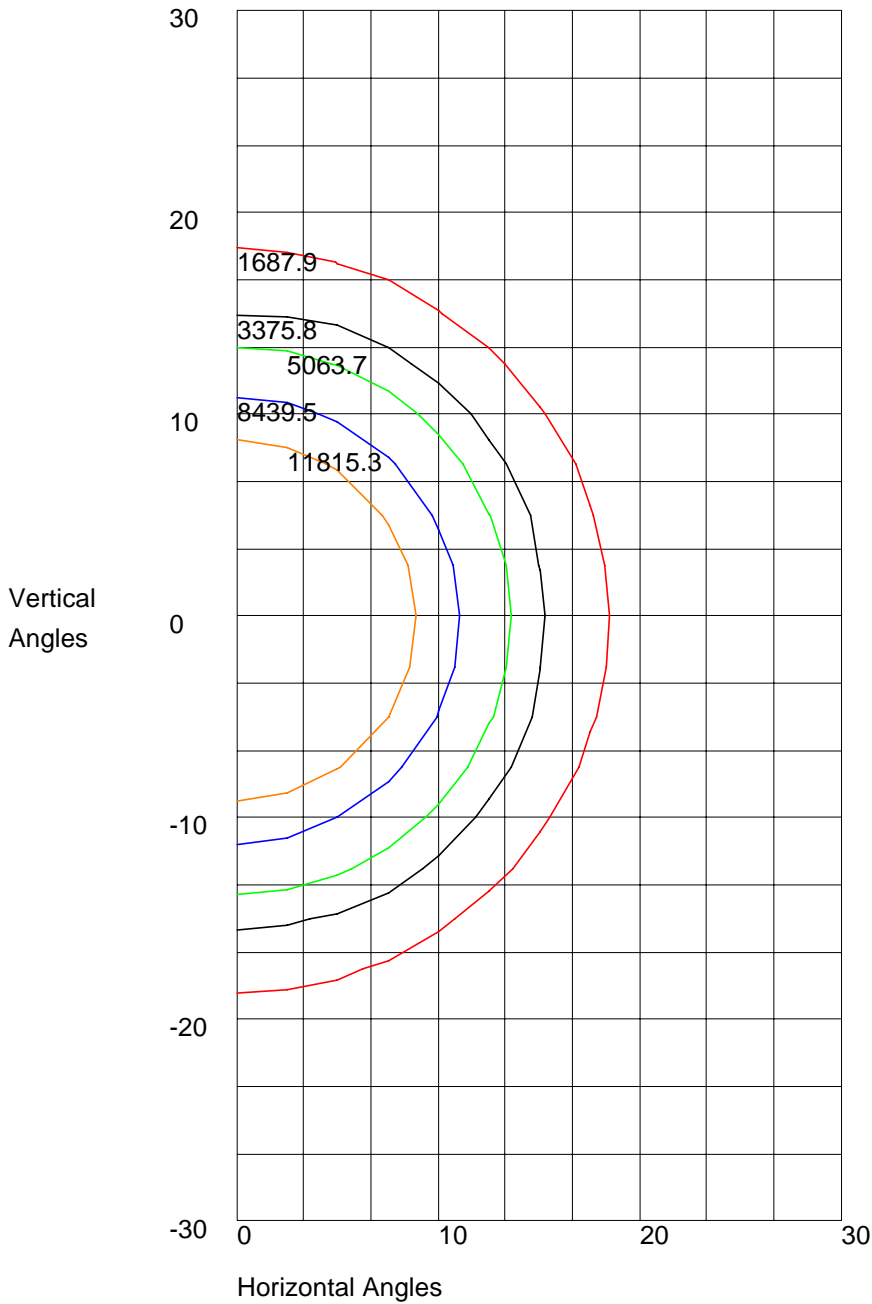
DEG.	HOR.	DEG.	VERT.
90	0	90	0
85	29	85	28
75	31	75	31
65	40	65	39
55	65	55	64
47.5	98	47.5	95
42.5	102	42.5	102
37.5	133	37.5	133
33	202	33	196
29	333	29	320
25.5	500	25.5	504
22.5	701	22.5	693
19.5	1221	19.5	1180
17	2223	17	2115
15	3524	15	3295
13	5545	13	5230
11	8350	11	8039
9	11711	9	11430
7	14955	7	14671
5	16741	5	16508
3	16427	3	16303
1	15356	1	15266
0	15083	0	15083
-1	15356	-1	15360
-3	16427	-3	16413
-5	16741	-5	16879
-7	14955	-7	15312
-9	11711	-9	12139
-11	8350	-11	8723
-13	5545	-13	5836
-15	3524	-15	3704
-17	2223	-17	2345
-19.5	1221	-19.5	1297
-22.5	701	-22.5	732
-25.5	500	-25.5	513
-29	333	-29	341
-33	202	-33	206
-37.5	133	-37.5	141
-42.5	102	-42.5	105
-47.5	98	-47.5	103
-55	65	-55	67
-65	40	-65	42
-75	31	-75	33
-85	29	-85	29
-90	0	-90	0

AXIAL CANDELA DISPLAY



Maximum Candela = 16879 Located At Horizontal Angle = 0, Vertical Angle = -5  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 16879 Located At Horizontal Angle = 0, Vertical Angle = -5  
50% Maximum Candela = 8439.5  
10% Maximum Candela = 1687.9