

# Report of Test

## LLIA002378-003

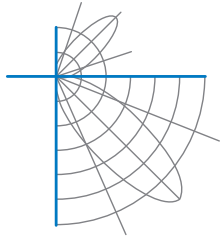
Catalog Number: SP-500PS-50K - 500W Setting  
Pole mounted, cast aluminum housing, clear plastic enclosure.  
504 white LEDs with plastic optics in front of each.  
One uPowerTek BLD-500-C230-ENU LED driver  
120.0Vac, 60.00Hz, 4.281A, 511.8W, 0.996PF, 7.6%THD(i)



### Performance Summary

Total Light Output	75009	lm	Illuminance at 10m	1548.0 lux
Luminaire Power	511.6	W	Beam Distance	786.9 Meters (to 0.25 lux)
Luminous Efficacy	146.6	lm/W		
Beam Spread (50%)	30.6° V x 32.5° H		Maximum Intensity	154800 cd
Field Spread (10%)	65.1° V x 65.8° H			
NEMA Type	5H x 4V			

**PREPARED FOR : Topaz Lighting, A Southwire Company, 925 Waverly Ave, Holtsville, NY**



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**Floodlight Summary:**

Report data based on absolute values as measured.

Maximum Luminous Intensity 154800.0 cd  
(Luminaire orientation as tested.) 0.0° vertical  
0.0° horizontal

Beam Spread At 10% of max intensity 65.1° V x 65.8° H  
At 50% of max intensity 30.6° V x 32.5° H  
At 90% of max intensity 11.5° V x 11.9° H

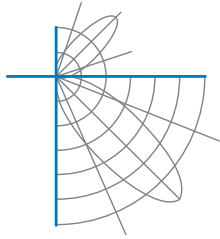
Beam Flux Total 75009 lm  
To 10% of max intensity 56141 lm  
To 50% of max intensity 26974 lm  
To 90% of max intensity 4709 lm

Total Light Output 75009.1 lm

Signed:

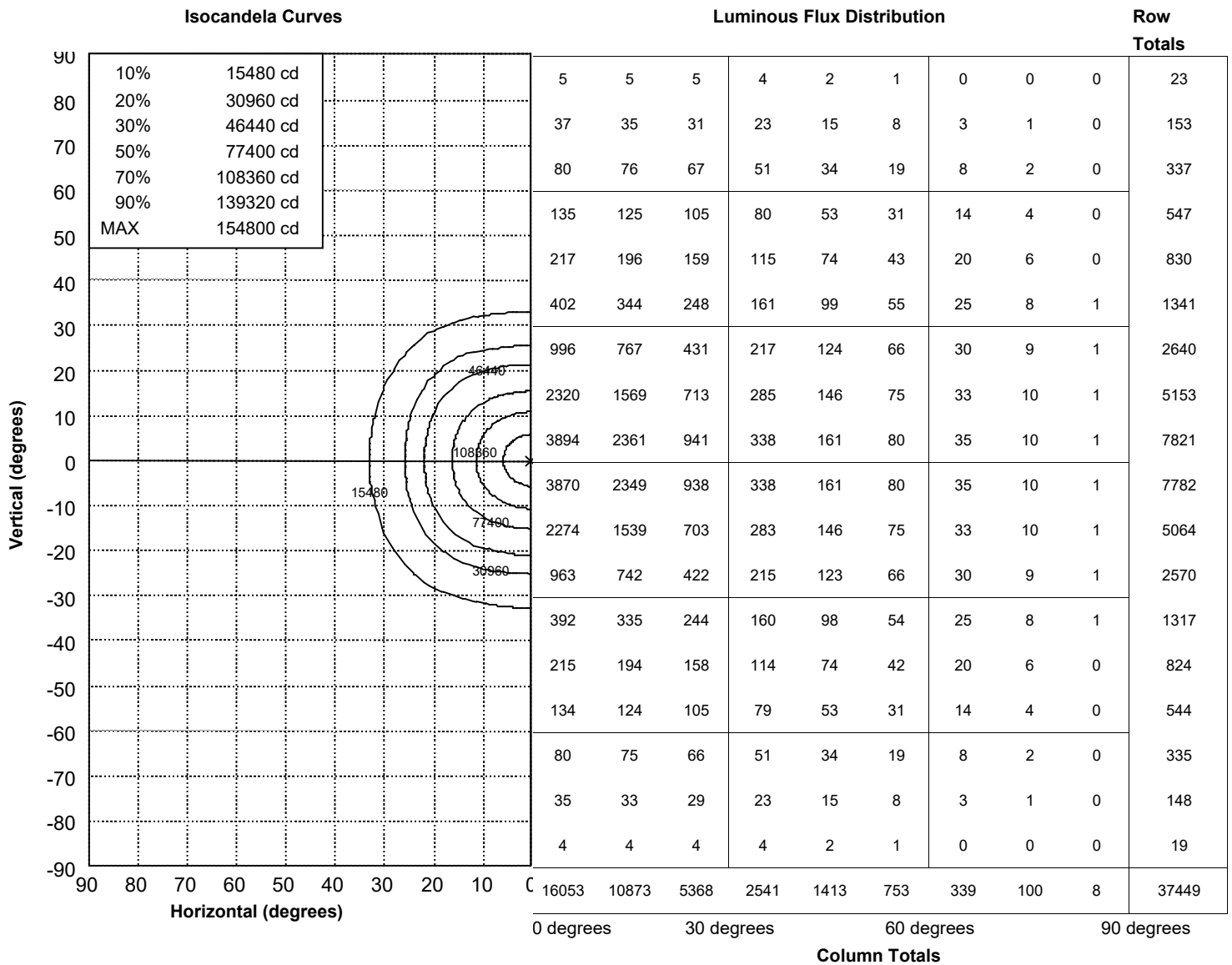
\_\_\_\_\_  
Authorized Signatory

Date of test 2-May-2024  
Date of report 2-May-2024

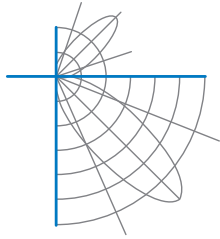


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Note: Left and right sides of photometric data have been averaged.  
Lumen values are tabulated as absolute lumen values.  
Candela values are tabulated as absolute candela values.



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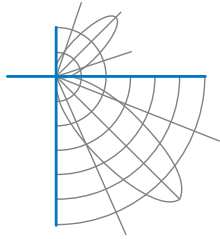
Vertical Angle (degrees)	Left Side Horizontal Angle (degrees)									Lumen Totals										
	-90	-60	-30	0	30	60	90	120	150											
-90	8.9 0.0	22.5 0.2	27.1 0.4	22.5 1.0	10.6 2.0	89.4 3.6	101.2 4.4	57.0 4.0	18.8 3.7	19										
	25.6 0.1	66.4 0.7	233.2 3.2	460.5 8.1	646.1 14.8	911.8 23.0	1043.9 29.5	1118.7 33.4	1145.7 35.2	148										
	41.8 0.1	236.2 2.1	639.6 8.4	1043.0 18.7	1555.0 33.6	2048.1 51.0	2408.3 66.2	2554.8 75.4	2600.0 79.5	335										
-60	56.9 0.3	477.8 4.0	1031.3 13.9	1736.0 30.6	2460.1 53.2	3171.2 79.5	3754.3 104.5	4165.7 123.6	4391.4 134.2	544										
	70.4 0.5	697.3 5.8	1498.2 19.6	2403.8 42.5	3378.0 74.0	4544.5 114.3	5665.4 157.9	6518.1 194.5	7009.9 214.9	824										
	81.9 0.6	890.2 7.5	1915.6 25.1	3096.0 54.4	4514.5 98.2	6400.8 160.2	8614.3 243.8	10860.0 335.2	12246.3 392.0	1317										
-30	90.9 0.8	1048.3 8.9	2263.4 29.9	3711.0 65.9	5662.1 123.1	8386.4 215.3	14763.8 421.7	24400.7 741.6	30328.8 962.9	2570										
	96.9 0.8	1159.7 10.0	2520.4 33.4	4189.0 74.9	6650.6 145.7	10954.8 283.1	24851.8 703.3	52209.3 1538.6	74746.9 2274.1	5064										
	99.8 0.9	1215.2 10.5	2664.5 35.4	4434.8 79.9	7294.5 160.7	13015.2 337.7	32919.2 937.7	80765.4 2348.7	132746.4 3870.4	7782										
0	99.8 0.9	1216.5 10.5	2667.0 35.4	4436.7 79.9	7306.5 160.9	13036.1 338.3	33018.9 941.0	81158.6 2360.8	133557.8 3893.7	7821										
	97.0 0.8	1162.6 10.0	2525.7 33.5	4198.8 75.1	6676.5 146.3	11011.2 284.7	25213.6 713.2	53309.3 1569.0	76383.4 2320.3	5153										
	91.0 0.8	1052.2 9.0	2270.1 29.9	3724.5 66.2	5692.6 123.7	8434.1 216.7	15085.3 430.8	25349.6 767.4	31481.6 995.9	2640										
30	82.2 0.6	894.2 7.5	1922.2 25.1	3110.1 54.7	4538.2 98.7	6440.3 161.3	8745.0 247.8	11101.5 343.6	12516.6 401.6	1341										
	70.9 0.5	700.8 5.8	1505.1 19.7	2414.7 42.7	3394.5 74.4	4568.5 115.0	5712.0 159.3	6575.9 196.3	7071.8 216.8	830										
	57.6 0.3	480.4 4.0	1037.6 13.9	1743.4 30.7	2468.7 53.4	3186.2 79.9	3781.7 105.3	4198.9 124.6	4421.1 135.2	547										
60	42.6 0.2	238.3 2.2	644.7 8.4	1048.5 18.8	1561.9 33.7	2057.8 51.2	2422.9 66.6	2575.6 76.1	2617.0 80.1	337										
	26.5 0.1	68.1 0.7	236.3 3.2	464.2 8.2	651.6 14.9	919.7 23.2	1087.2 30.5	1173.5 35.1	1191.9 36.9	153										
	9.7 0.0	23.8 0.2	29.3 0.4	24.8 1.1	11.7 2.0	91.3 3.7	110.9 4.9	83.8 5.2	73.4 5.4	23										
90	<table border="0" style="width:100%; text-align:center;"> <tr> <td>8</td><td>100</td><td>339</td><td>753</td><td>1413</td><td>2541</td><td>5368</td><td>10873</td><td>16053</td><td>37449</td> </tr> </table>									8	100	339	753	1413	2541	5368	10873	16053	37449	37449
8	100	339	753	1413	2541	5368	10873	16053	37449											

Lumen Totals

Legend:

candelas
lumens

Standard table of intensity and illuminance in accordance with IES procedures.  
Angular data is shown with the polar axis horizontal.  
Luminous flux expressed as lumens within marked zones.  
Luminous intensity expressed as candelas at centre of zones.



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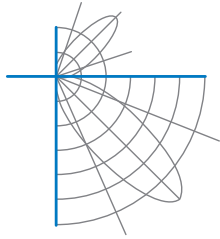
Vertical Angle (degrees)	Right Side Horizontal Angle (degrees)									Lumen Totals
	0	30	60	90	120	150	180	210	240	
-90	18.8 3.7	57.0 4.0	101.2 4.4	89.4 3.6	10.6 2.0	22.5 1.0	27.1 0.4	22.5 0.2	8.9 0.0	19
	1145.7 35.2	1118.7 33.4	1043.9 29.5	911.8 23.0	646.1 14.8	460.5 8.1	233.2 3.2	66.4 0.7	25.6 0.1	148
	2600.0 79.5	2554.8 75.4	2408.3 66.2	2048.1 51.0	1555.0 33.6	1043.0 18.7	639.6 8.4	236.2 2.1	41.8 0.1	335
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	12246.3 392.0	10860.0 335.2	8614.3 243.8	6400.8 160.2	4514.5 98.2	3096.0 54.4	1915.6 25.1	890.2 7.5	81.9 0.6	1317
-30	30328.8 962.9	24400.7 741.6	14763.8 421.7	8386.4 215.3	5662.1 123.1	3711.0 65.9	2263.4 29.9	1048.3 8.9	90.9 0.8	2570
	74746.9 2274.1	52209.3 1538.6	24851.8 703.3	10954.8 283.1	6650.6 145.7	4189.0 74.9	2520.4 33.4	1159.7 10.0	96.9 0.8	5064
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	1191.9 36.9	1173.5 35.1	1087.2 30.5	919.7 23.2	651.6 14.9	464.2 8.2	236.3 3.2	68.1 0.7	26.5 0.1	153
	73.4 5.4	83.8 5.2	110.9 4.9	91.3 3.7	11.7 2.0	24.8 1.1	29.3 0.4	23.8 0.2	9.7 0.0	23
90	16053	10873	5368	2541	1413	753	339	100	8	37449

**Lumen Totals**

Legend:

<b>candelas</b>
lumens

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Angular data is shown with the polar axis horizontal.  
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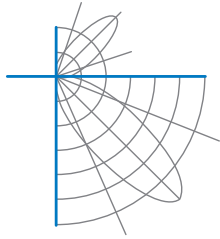
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**Candela trace through origin.**

Vertical Trace			
Angle	Intensity (cd)	Angle	Intensity (cd)
90.0	1.31	0.0	154800.00
87.0	3.49	-3.0	150100.00
84.0	152.42	-6.0	137600.00
81.0	445.90	-9.0	119200.00
78.0	801.04	-12.0	98503.50
75.0	1193.81	-15.0	78361.95
72.0	1628.04	-18.0	60670.32
69.0	2063.91	-21.0	46081.59
66.0	2476.86	-24.0	34500.83
63.0	2935.64	-27.0	25551.10
60.0	3438.61	-30.0	19098.74
57.0	3992.85	-33.0	14681.14
54.0	4661.65	-36.0	11546.07
51.0	5394.28	-39.0	9409.82
48.0	6188.55	-42.0	8012.76
45.0	7063.56	-45.0	7013.92
42.0	8079.31	-48.0	6149.82
39.0	9522.20	-51.0	5364.82
36.0	11747.91	-54.0	4630.01
33.0	15058.64	-57.0	3971.57
30.0	19720.62	-60.0	3412.42
27.0	26485.01	-63.0	2917.64
24.0	35707.52	-66.0	2463.77
21.0	47488.48	-69.0	2051.36
18.0	62174.31	-72.0	1601.31
15.0	80007.78	-75.0	1145.26
12.0	100200.00	-78.0	749.21
9.0	120600.00	-81.0	336.26
6.0	138600.00	-84.0	47.13
3.0	150700.00	-87.0	1.31
0.0	154800.00	-90.0	1.66

Horizontal Trace			
Angle	Intensity (cd)	Angle	Intensity (cd)
90.0	1.57	0.0	154800.00
87.0	60.30	-3.0	150400.00
84.0	212.20	-6.0	138975.00
81.0	548.63	-9.0	123400.00
78.0	885.07	-12.0	104818.05
75.0	1221.51	-15.0	85390.20
72.0	1659.65	-18.0	67186.80
69.0	2097.80	-21.0	51168.61
66.0	2535.94	-24.0	37721.03
63.0	3038.73	-27.0	27691.39
60.0	3573.83	-30.0	20441.53
57.0	4108.93	-33.0	15279.21
54.0	4731.22	-36.0	12421.95
51.0	5527.86	-39.0	10181.58
48.0	6324.51	-42.0	8558.09
45.0	7372.40	-45.0	7372.40
42.0	8558.09	-48.0	6324.51
39.0	10181.58	-51.0	5527.86
36.0	12421.95	-54.0	4731.22
33.0	15279.21	-57.0	4108.93
30.0	20441.53	-60.0	3573.83
27.0	27691.39	-63.0	3038.73
24.0	37721.03	-66.0	2535.94
21.0	51168.61	-69.0	2097.80
18.0	67186.80	-72.0	1659.65
15.0	85390.20	-75.0	1221.51
12.0	104818.05	-78.0	885.07
9.0	123400.00	-81.0	548.63
6.0	138975.00	-84.0	212.20
3.0	150400.00	-87.0	60.30
0.0	154800.00	-90.0	1.57

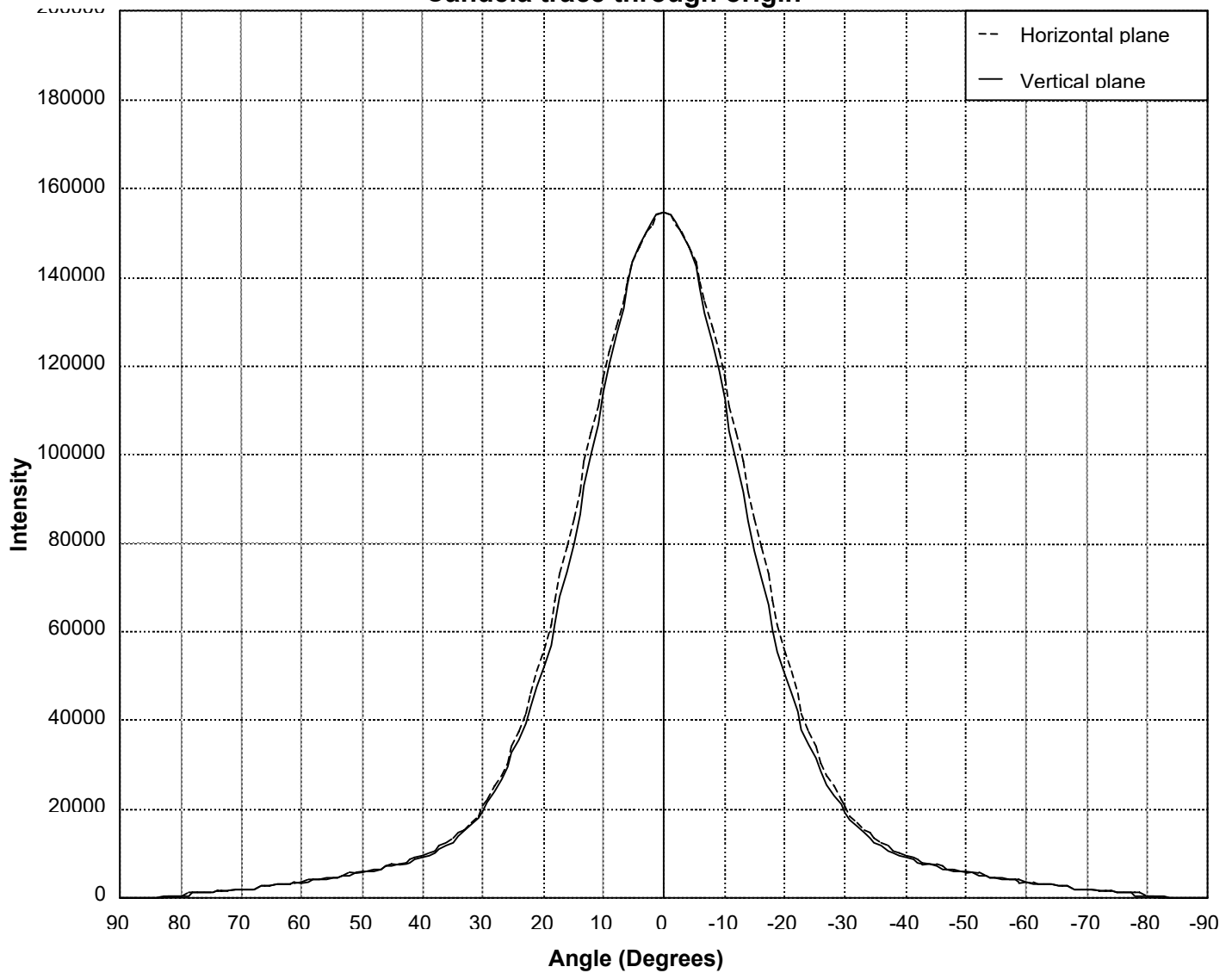
Note: Luminaire orientation as tested.  
The left and right sides of photometric data have been averaged.



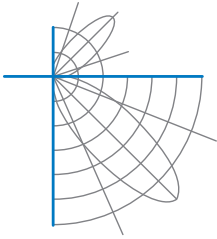
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**Candela trace through origin**



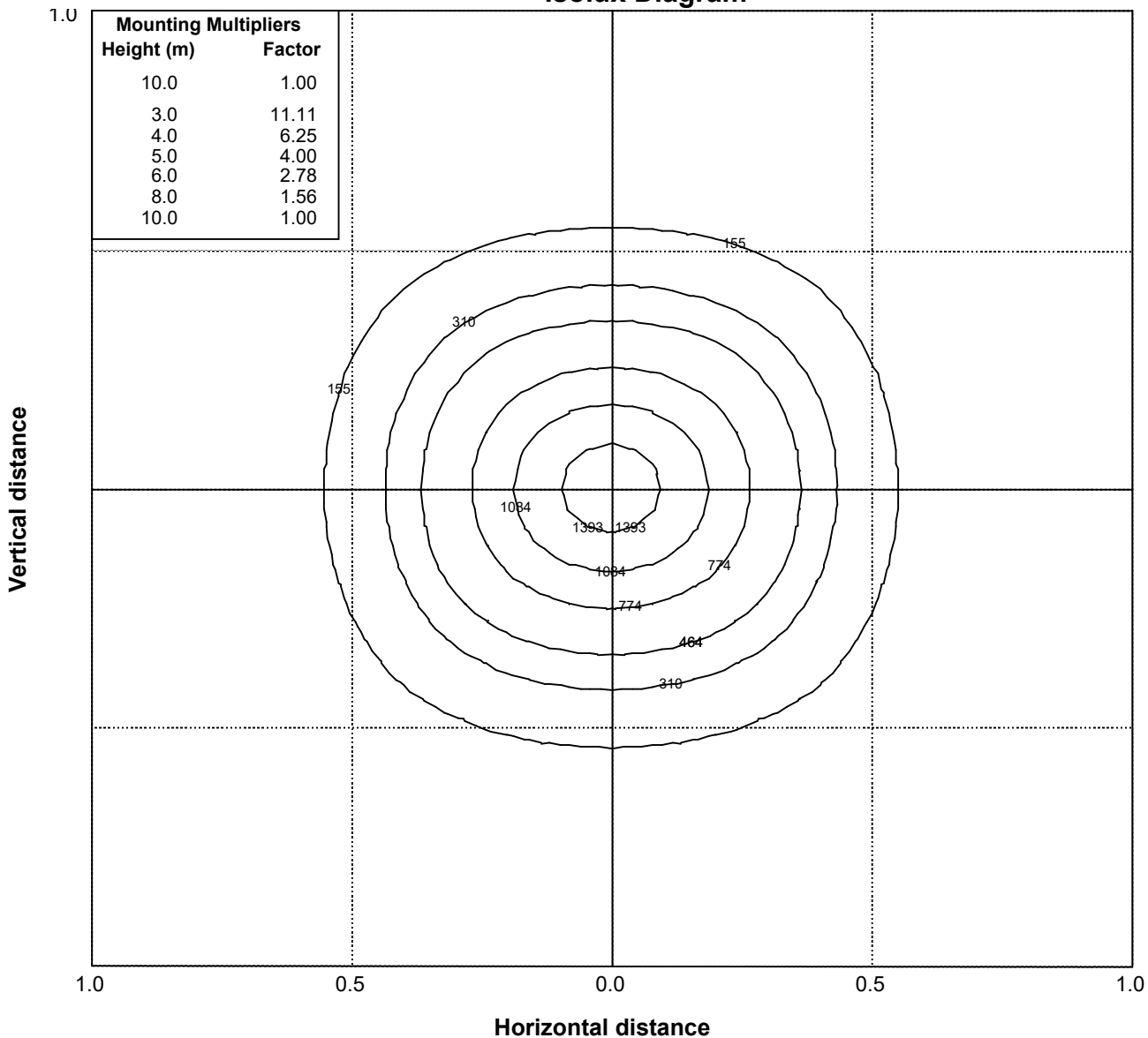
Note: The intensity units are expressed as candelas.  
The left and right sides of photometric data have been averaged.  
Both the vertical and the horizontal trace pass through the nadir.



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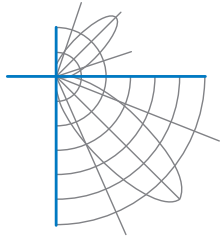
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**Isolux Diagram**



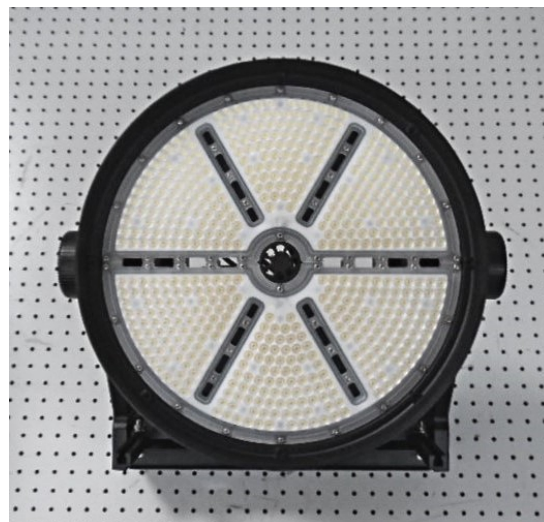
Note: The isolux levels are based on a mounting height of H = 10.0 metres. Grid values show multiples of mounting height.  
The isolux contours are set to 10%, 20%, 30%, 50%, 70%, 90% of the maximum.  
The isolux contour units are expressed as lux. The left and right sides of photometric data have been averaged.

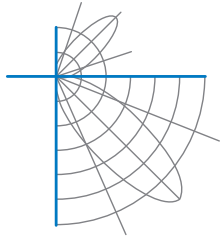




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**Test Distance** 9.5 m  
**Test Temperature** 25.3 °C

**Notes** The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Tested in accordance with the applicable sections of publications: IES LM-79-19, IES LM-75-19, and IES LM-35-20.

The luminous intensity values, and other derived quantities, contained in this report are based on the absolute data, as measured.

Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the CIE (B,  $\beta$ ) coordinate system as defined in CIE publication number 121.

This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with \* are not covered.

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.