



Report of Test

LLIA002378-004

Catalog Number: SP-750PS-50K - 450W Setting
Pole mounted, cast aluminum housing, clear plastic enclosure.
960 white LEDs with plastic optics in front of each.
One uPowerTek BLD-700-C420-ENU LED driver
119.9Vac, 60.00Hz, 3.855A, 457.2W, 0.989PF, 12.1%THD(i)



Performance Summary

Total Light Output	76783	lm	Illuminance at 10m	1568.0 lux
Luminaire Power	456.4	W	Beam Distance	792.0 Meters (to 0.25 lux)
Luminous Efficacy	168.2	lm/W		
Beam Spread (50%)	34.0° V x 34.0° H		Maximum Intensity	156800 cd
Field Spread (10%)	65.7° V x 65.8° H			
NEMA Type	5H x 5V			

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 156800.0 cd
(Luminaire orientation as tested.) 0.0° vertical
0.0° horizontal

Beam Spread At 10% of max intensity 65.7° V x 65.8° H
At 50% of max intensity 34.0° V x 34.0° H
At 90% of max intensity 14.1° V x 14.1° H

Beam Flux Total 76783 lm
To 10% of max intensity 58016 lm
To 50% of max intensity 32186 lm
To 90% of max intensity 7026 lm

Total Light Output 76782.7 lm

Signed:

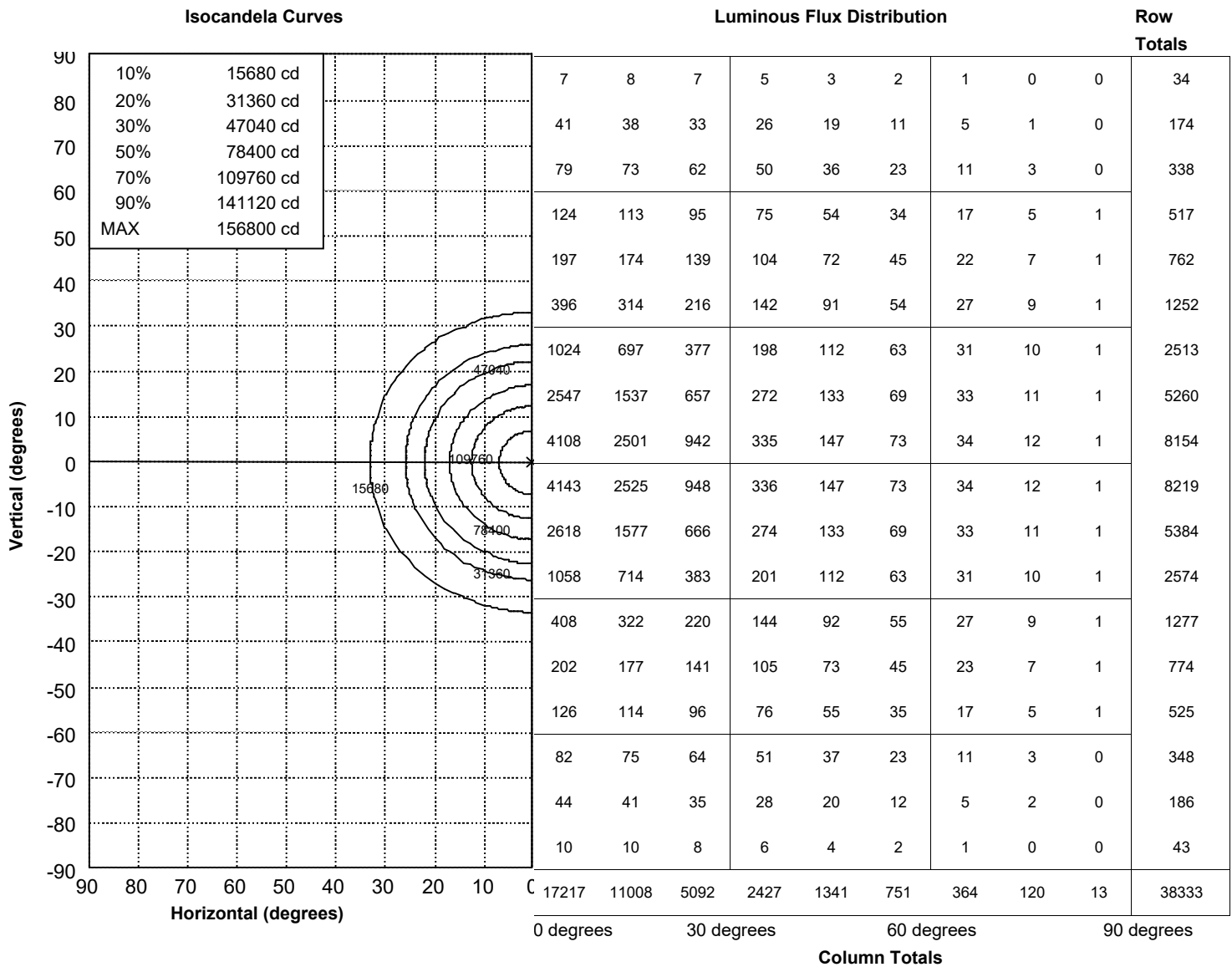
Authorized Signatory

Date of test 22-May-2024
Date of report 22-May-2024

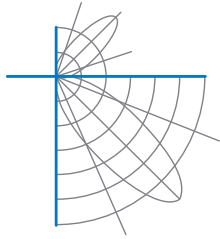


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Note: Left and right sides of photometric data have been averaged.
Lumen values are tabulated as absolute lumen values.
Candela values are tabulated as absolute candela values.



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Vertical Angle (degrees)	Left Side Horizontal Angle (degrees)									Lumen Totals
	-90	-60				-30				
-90	21.5 0.1	58.1 0.5	86.1 1.2	104.7 2.4	103.3 3.9	175.5 6.1	236.1 8.3	252.4 9.7	263.2 10.5	43
	61.1 0.2	171.2 1.5	392.8 5.3	673.2 11.8	905.6 19.6	1105.9 27.6	1272.6 35.0	1396.1 40.9	1471.2 44.5	186
	99.0 0.4	387.9 3.4	873.4 11.4	1333.0 23.3	1732.3 37.3	2055.0 51.3	2323.9 64.2	2545.1 75.0	2707.1 82.0	348
-60	133.9 0.5	657.3 5.5	1324.9 17.3	1976.2 34.6	2547.1 54.9	3034.0 75.9	3474.5 96.5	3848.7 114.3	4103.5 125.8	525
	164.9 0.8	895.4 7.4	1734.6 22.6	2572.6 45.1	3360.3 72.8	4159.7 104.6	5033.2 140.9	5898.0 177.3	6488.0 202.2	774
	190.8 1.0	1094.4 9.1	2073.2 27.1	3110.5 54.6	4248.0 92.1	5683.3 143.7	7756.5 220.1	10463.8 321.9	12730.2 407.6	1277
-30	210.9 1.1	1248.2 10.3	2335.7 30.6	3558.2 63.0	5113.3 112.5	7844.6 200.5	13326.5 383.4	23120.0 714.0	32996.6 1058.2	2574
	224.4 1.2	1351.9 11.2	2516.2 33.1	3888.6 69.5	6008.1 133.2	10658.2 274.3	23346.3 666.4	52537.4 1576.5	88169.2 2618.2	5384
	230.9 1.2	1402.8 11.6	2604.1 34.4	4065.9 73.1	6587.1 147.3	12974.3 335.7	33171.5 947.9	87329.0 2525.0	141593.2 4142.9	8219
0	230.5 1.2	1400.9 11.6	2602.6 34.4	4066.3 73.1	6579.8 147.1	12937.3 334.7	32975.4 941.9	86428.2 2501.4	140393.6 4108.2	8154
	223.1 1.2	1346.8 11.2	2510.6 33.1	3881.0 69.3	5987.3 132.7	10566.6 272.0	23042.6 657.2	51034.3 1536.6	85491.5 2547.1	5260
	208.9 1.1	1239.8 10.3	2325.1 30.5	3543.3 62.7	5089.6 111.9	7762.0 198.4	13099.0 377.0	22616.8 696.7	32022.7 1024.5	2513
30	188.4 0.9	1083.7 9.0	2055.9 26.8	3087.2 54.2	4224.0 91.5	5630.5 142.3	7625.1 216.4	10201.0 314.2	12349.4 396.3	1252
	162.3 0.8	883.3 7.3	1712.4 22.3	2539.1 44.6	3337.9 72.2	4130.5 103.8	4977.8 139.2	5790.2 174.0	6340.1 197.5	762
	131.6 0.5	644.3 5.4	1302.1 17.0	1937.5 33.9	2507.4 54.0	2992.1 74.8	3429.9 95.2	3795.8 112.6	4040.0 123.6	517
60	97.3 0.3	374.0 3.2	847.3 11.1	1290.9 22.6	1683.2 36.2	1997.1 49.9	2255.5 62.4	2466.7 72.7	2620.5 79.4	338
	60.2 0.2	160.1 1.4	365.9 4.9	634.5 11.1	859.2 18.5	1040.4 26.0	1193.3 32.8	1299.2 38.1	1361.3 41.2	174
	21.5 0.1	55.6 0.4	74.1 1.0	80.0 2.0	59.7 3.2	134.7 5.2	191.2 7.1	167.0 7.7	95.3 7.2	34
90	<p style="text-align: center;">13 120 364 751 1341 2427 5092 11008 17217</p>									38333

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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119.9Vac, 60.00Hz, 3.855A, 457.2W, 0.989PF, 12.1%THD(i)

Vertical Angle (degrees)	Right Side Horizontal Angle (degrees)									Lumen Totals
	0	30	60	90	120	150	180	210	240	
-90	263.2 10.5	252.4 9.7	236.1 8.3	175.5 6.1	103.3 3.9	104.7 2.4	86.1 1.2	58.1 0.5	21.5 0.1	43
	1471.2 44.5	1396.1 40.9	1272.6 35.0	1105.9 27.6	905.6 19.6	673.2 11.8	392.8 5.3	171.2 1.5	61.1 0.2	186
	2707.1 82.0	2545.1 75.0	2323.9 64.2	2055.0 51.3	1732.3 37.3	1333.0 23.3	873.4 11.4	387.9 3.4	99.0 0.4	348
-60	4103.5 125.8	3848.7 114.3	3474.5 96.5	3034.0 75.9	2547.1 54.9	1976.2 34.6	1324.9 17.3	657.3 5.5	133.9 0.5	525
	6488.0 202.2	5898.0 177.3	5033.2 140.9	4159.7 104.6	3360.3 72.8	2572.6 45.1	1734.6 22.6	895.4 7.4	164.9 0.8	774
	12730.2 407.6	10463.8 321.9	7756.5 220.1	5683.3 143.7	4248.0 92.1	3110.5 54.6	2073.2 27.1	1094.4 9.1	190.8 1.0	1277
-30	32996.6 1058.2	23120.0 714.0	13326.5 383.4	7844.6 200.5	5113.3 112.5	3558.2 63.0	2335.7 30.6	1248.2 10.3	210.9 1.1	2574
	88169.2 2618.2	52537.4 1576.5	23346.3 666.4	10658.2 274.3	6008.1 133.2	3888.6 69.5	2516.2 33.1	1351.9 11.2	224.4 1.2	5384
	141593.2 4142.9	87329.0 2525.0	33171.5 947.9	12974.3 335.7	6587.1 147.3	4065.9 73.1	2604.1 34.4	1402.8 11.6	230.9 1.2	8219
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	1361.3 41.2	1299.2 38.1	1193.3 32.8	1040.4 26.0	859.2 18.5	634.5 11.1	365.9 4.9	160.1 1.4	60.2 0.2	174
	95.3 7.2	167.0 7.7	191.2 7.1	134.7 5.2	59.7 3.2	80.0 2.0	74.1 1.0	55.6 0.4	21.5 0.1	34
90	17217	11008	5092	2427	1341	751	364	120	13	38333

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.
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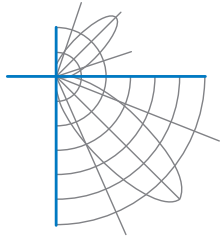
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Candela trace through origin.

Vertical Trace			
Angle	Intensity (cd)	Angle	Intensity (cd)
90.0	0.00	0.0	156800.00
87.0	1.96	-3.0	154300.00
84.0	212.74	-6.0	146300.00
81.0	634.29	-9.0	133000.00
78.0	1005.73	-12.0	115100.00
75.0	1370.09	-15.0	94231.54
72.0	1749.16	-18.0	72617.54
69.0	2128.77	-21.0	53373.84
66.0	2517.65	-24.0	38650.61
63.0	2905.43	-27.0	28229.48
60.0	3319.36	-30.0	20858.90
57.0	3757.24	-33.0	15643.98
54.0	4250.69	-36.0	12031.94
51.0	4831.27	-39.0	9549.48
48.0	5535.49	-42.0	7828.42
45.0	6427.06	-45.0	6579.02
42.0	7615.47	-48.0	5641.69
39.0	9264.09	-51.0	4914.06
36.0	11662.67	-54.0	4317.68
33.0	15222.43	-57.0	3821.51
30.0	20333.32	-60.0	3389.61
27.0	27459.92	-63.0	2984.95
24.0	37406.12	-66.0	2612.96
21.0	51298.75	-69.0	2231.17
18.0	69957.52	-72.0	1854.28
15.0	91516.51	-75.0	1485.01
12.0	112600.00	-78.0	1112.48
9.0	130800.00	-81.0	737.22
6.0	144600.00	-84.0	381.03
3.0	153400.00	-87.0	65.68
0.0	156800.00	-90.0	2.91

Horizontal Trace			
Angle	Intensity (cd)	Angle	Intensity (cd)
90.0	1.67	0.0	156800.00
87.0	139.53	-3.0	153750.00
84.0	349.21	-6.0	145100.00
81.0	702.17	-9.0	131800.00
78.0	1055.14	-12.0	113625.00
75.0	1408.10	-15.0	92675.20
72.0	1770.87	-18.0	71429.09
69.0	2133.65	-21.0	52834.72
66.0	2496.42	-24.0	38443.69
63.0	2911.33	-27.0	28260.07
60.0	3352.31	-30.0	20912.58
57.0	3793.30	-33.0	15472.49
54.0	4310.64	-36.0	12226.17
51.0	4980.71	-39.0	9690.58
48.0	5650.78	-42.0	7865.70
45.0	6662.01	-45.0	6662.01
42.0	7865.70	-48.0	5650.78
39.0	9690.58	-51.0	4980.71
36.0	12226.17	-54.0	4310.64
33.0	15472.49	-57.0	3793.30
30.0	20912.58	-60.0	3352.31
27.0	28260.07	-63.0	2911.33
24.0	38443.69	-66.0	2496.42
21.0	52834.72	-69.0	2133.65
18.0	71429.09	-72.0	1770.87
15.0	92675.20	-75.0	1408.10
12.0	113625.00	-78.0	1055.14
9.0	131800.00	-81.0	702.17
6.0	145100.00	-84.0	349.21
3.0	153750.00	-87.0	139.53
0.0	156800.00	-90.0	1.67

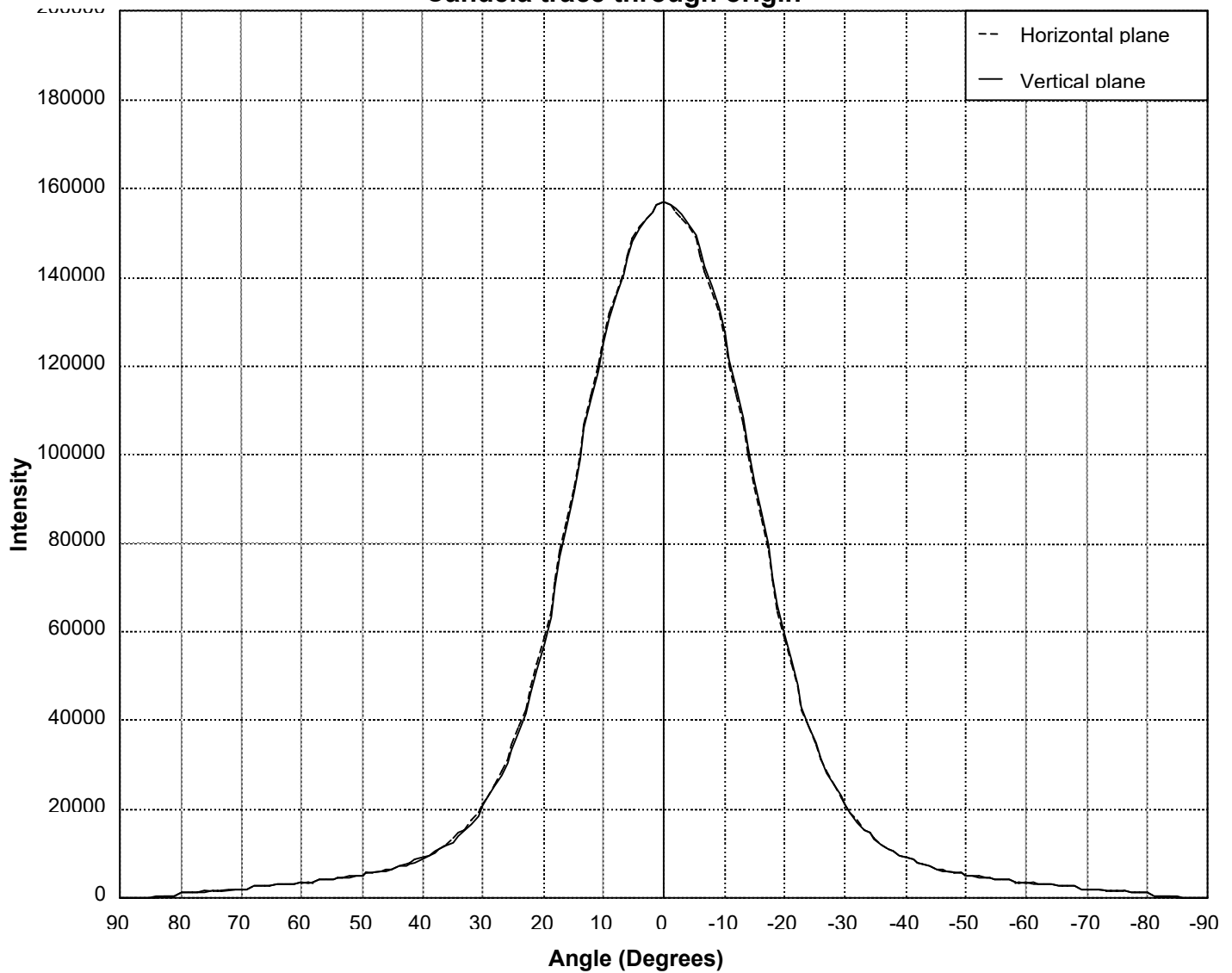
Note: Luminaire orientation as tested.
The left and right sides of photometric data have been averaged.



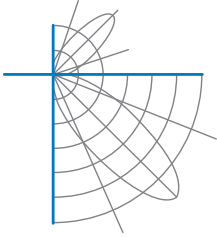
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Candela trace through origin



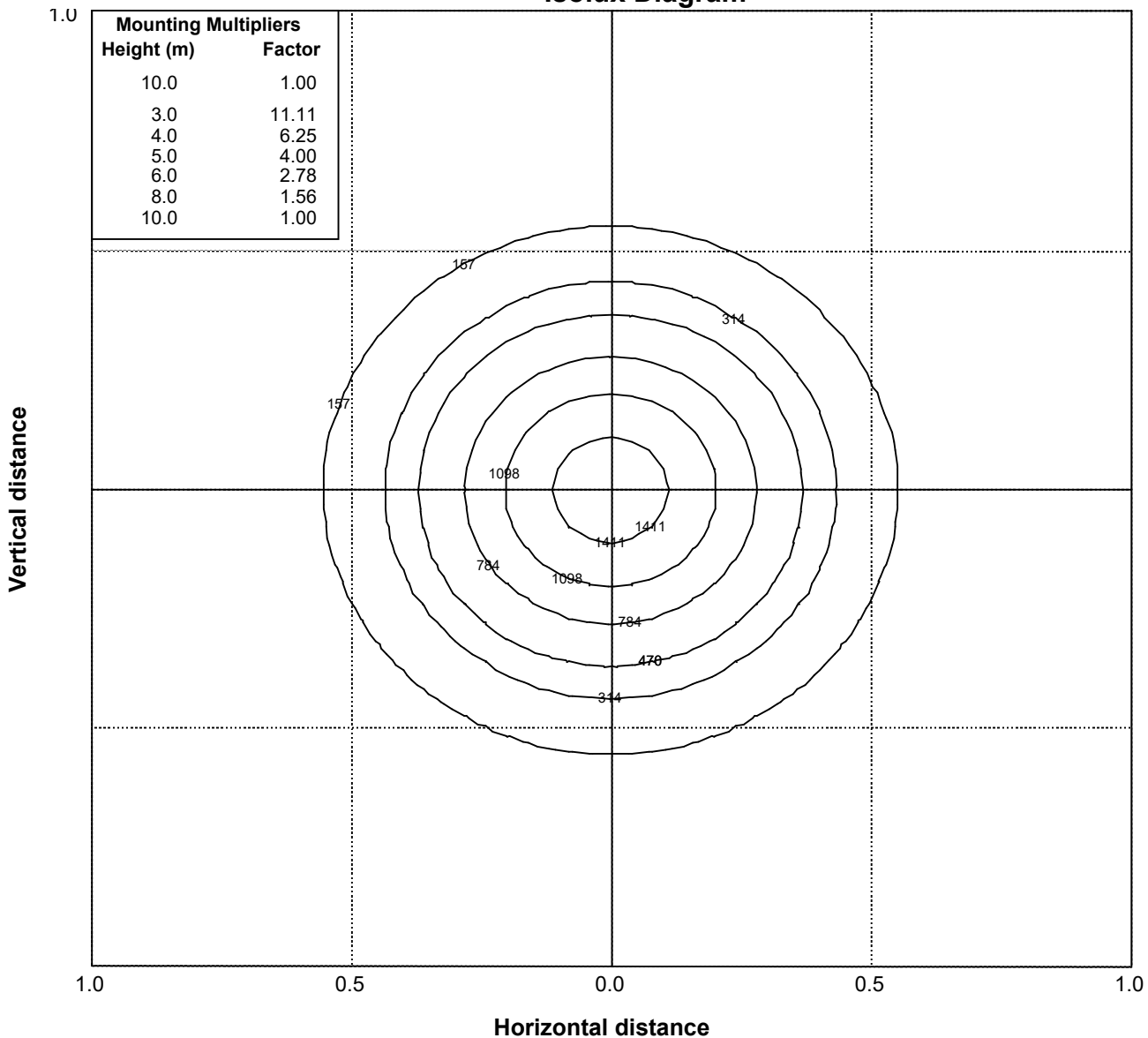
Note: The intensity units are expressed as candelas.
The left and right sides of photometric data have been averaged.
Both the vertical and the horizontal trace pass through the nadir.



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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 25.1 °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, β) 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.