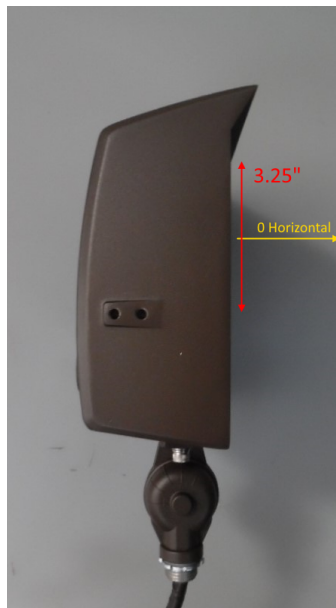




Report of Test

LLIA002372-005

Catalog Number: FL-60PCS-KNTR - 50W Setting - 4000K Setting
Knuckle or trunion mounted, formed aluminum housing, white
plastic reflector, clear glass enclosure in front of LEDs
192 LEDs, 96 cool white and 96 warm white LEDs
Internal LED driver
120.0Vac, 60.00Hz, 0.4344A, 51.52W, 0.989PF, 9.4%THD(i)



Performance Summary

Total Light Output	8290	lm	Illuminance at 10m	29.9 lux
Luminaire Power	51.4	W	Beam Distance	109.4 Meters (to 0.25 lux)
Luminous Efficacy	161.3	lm/W	Maximum Intensity	2989.7 cd
Beam Spread (50%)	114.0° V x 113.7° H			
Field Spread (10%)	148.2° V x 155.0° H			
NEMA Type	7H x 7V			

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



Test Report No. LLIA002372-005

Catalog Number: FL-60PCS-KNTR - 50W Setting - 4000K Setting
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120.0Vac, 60.00Hz, 0.4344A, 51.52W, 0.989PF, 9.4%THD(i)

Floodlight Summary:

Report data based on absolute values as measured.

Maximum Luminous Intensity (Luminaire orientation as tested.) 2989.7 cd
0.5° vertical
0.0° horizontal

Beam Spread At 10% of max intensity 148.2° V x 155.0° H
At 50% of max intensity 114.0° V x 113.7° H
At 90% of max intensity 51.6° V x 51.6° H

Beam Flux Total 8290 lm
To 10% of max intensity 8154 lm
To 50% of max intensity 6533 lm
To 90% of max intensity 1754 lm

Total Light Output 8290.1 lm

Signed:

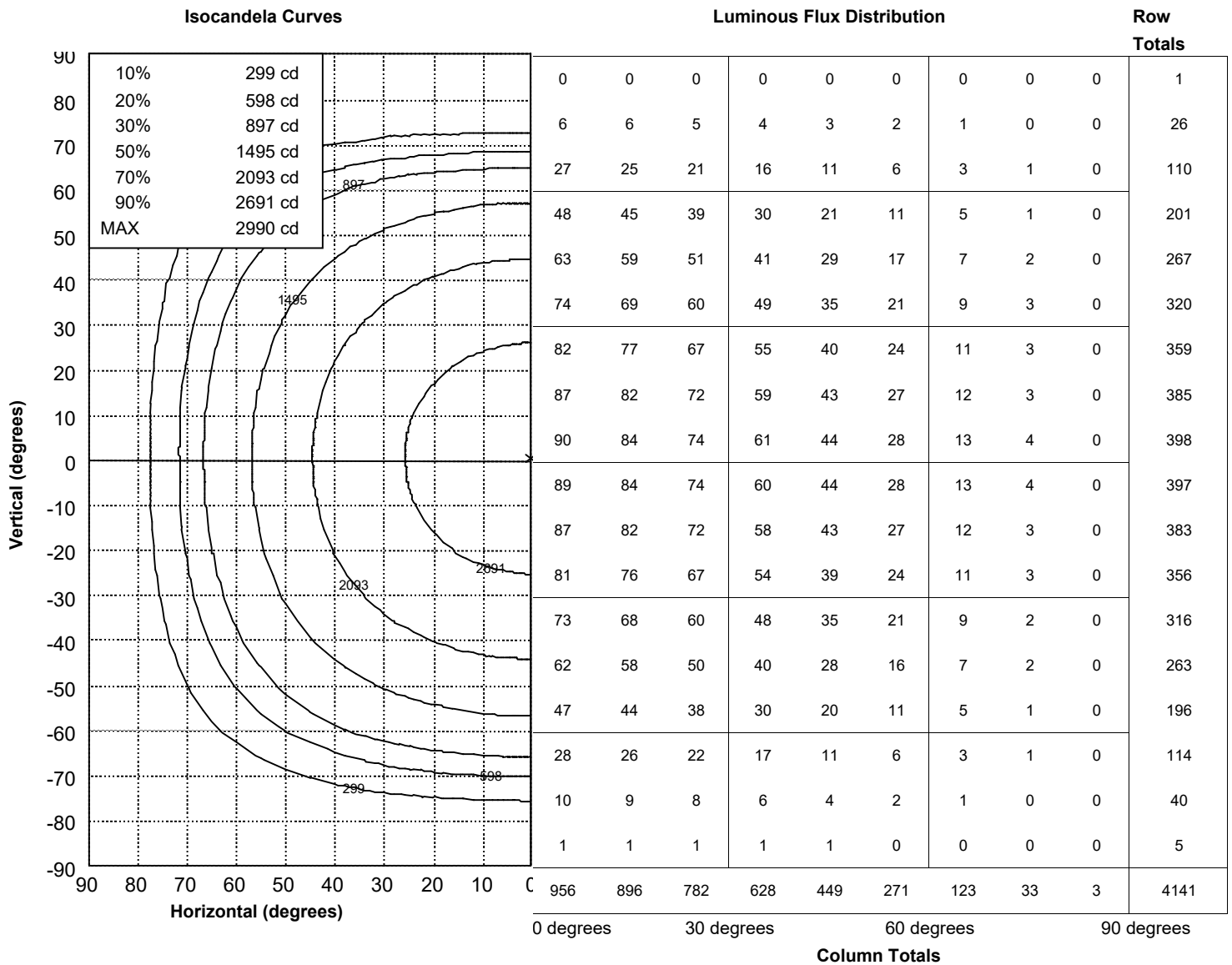
Authorized Signatory

Date of test 7-May-2024
Date of report 8-May-2024

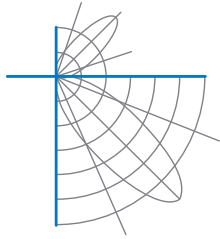


Test Report No. LLIA002372-005

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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	90	60											
-90	2.5 0.0	6.6 0.1	8.7 0.1	12.0 0.3	14.2 0.5	21.1 0.7	21.8 0.9	20.6 1.0	21.2 1.0	5										
	7.3 0.0	19.7 0.2	73.9 1.0	129.4 2.3	157.0 3.8	221.6 5.8	266.7 7.8	302.7 9.4	326.1 10.3	40										
	11.8 0.0	74.3 0.7	206.5 2.7	328.7 6.0	498.0 11.0	666.1 16.8	799.1 22.2	889.6 26.2	940.2 28.5	114										
-60	16.1 0.1	153.7 1.3	339.7 4.7	635.3 11.2	931.7 20.0	1192.4 29.6	1386.7 37.9	1510.5 44.1	1577.4 47.4	196										
	19.8 0.1	224.7 1.9	532.3 7.0	924.4 16.3	1318.1 28.1	1608.4 40.0	1829.0 50.2	1976.0 57.8	2044.7 61.8	263										
	23.0 0.2	286.5 2.5	703.9 9.2	1180.1 20.7	1608.3 34.6	1937.3 48.2	2174.8 59.8	2334.7 68.4	2408.9 72.9	316										
-30	25.5 0.2	335.0 3.0	840.1 11.0	1384.1 24.2	1836.5 39.4	2182.5 54.3	2433.4 66.9	2603.3 76.3	2680.7 81.1	356										
	27.4 0.3	368.5 3.3	933.9 12.3	1522.5 26.5	1985.0 42.6	2345.3 58.3	2606.6 71.7	2781.5 81.5	2862.3 86.6	383										
	28.3 0.3	387.2 3.5	986.3 12.9	1598.8 27.8	2063.7 44.3	2430.1 60.5	2696.7 74.2	2875.3 84.3	2957.7 89.5	397										
0	28.4 0.3	388.1 3.5	989.7 13.0	1601.4 27.8	2069.4 44.4	2436.9 60.6	2704.1 74.4	2882.4 84.5	2965.9 89.7	398										
	27.7 0.3	371.3 3.3	942.9 12.4	1531.5 26.7	1996.7 42.9	2358.1 58.6	2618.9 72.1	2797.8 82.0	2880.0 87.1	385										
	26.0 0.2	338.9 3.0	849.8 11.1	1395.8 24.4	1850.6 39.8	2200.0 54.7	2452.1 67.4	2623.7 76.9	2702.2 81.7	359										
30	23.5 0.2	291.1 2.5	715.5 9.4	1195.2 21.0	1626.2 35.0	1959.0 48.7	2197.3 60.4	2359.9 69.1	2435.9 73.6	320										
	20.4 0.1	229.3 1.9	544.1 7.2	942.6 16.6	1337.6 28.6	1634.6 40.6	1853.9 50.9	2002.7 58.6	2071.9 62.6	267										
	16.5 0.1	157.1 1.3	351.4 4.8	652.5 11.5	956.7 20.5	1219.8 30.2	1417.9 38.8	1541.3 45.1	1606.9 48.4	201										
60	12.2 0.0	75.9 0.7	213.7 2.7	320.2 5.9	500.5 10.8	647.7 16.3	765.2 21.4	845.2 25.1	893.1 27.3	110										
	7.5 0.0	19.8 0.2	73.3 1.0	112.6 2.0	104.5 2.8	140.3 3.9	147.6 4.9	154.6 5.6	162.2 6.1	26										
	2.6 0.0	6.4 0.0	6.1 0.1	6.3 0.2	5.2 0.2	3.5 0.1	1.7 0.1	1.1 0.1	1.1 0.1	1										
90	<table border="1"> <tr> <td>3</td> <td>33</td> <td>123</td> <td>271</td> <td>449</td> <td>628</td> <td>782</td> <td>896</td> <td>956</td> <td>4141</td> </tr> </table>									3	33	123	271	449	628	782	896	956	4141	
3	33	123	271	449	628	782	896	956	4141											

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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192 LEDs, 96 cool white and 96 warm white LEDs
Internal LED driver
120.0Vac, 60.00Hz, 0.4344A, 51.52W, 0.989PF, 9.4%THD(i)

Vertical Angle (degrees)	Right Side Horizontal Angle (degrees)									Lumen Totals
	0	30	60	90	120	150	180	210	240	
-90	21.2 1.0	20.6 1.0	21.8 0.9	21.1 0.7	14.2 0.5	12.0 0.3	8.7 0.1	6.6 0.1	2.5 0.0	5
	326.1 10.3	302.7 9.4	266.7 7.8	221.6 5.8	157.0 3.8	129.4 2.3	73.9 1.0	19.7 0.2	7.3 0.0	40
	940.2 28.5	889.6 26.2	799.1 22.2	666.1 16.8	498.0 11.0	328.7 6.0	206.5 2.7	74.3 0.7	11.8 0.0	114
-60	1577.4 47.4	1510.5 44.1	1386.7 37.9	1192.4 29.6	931.7 20.0	635.3 11.2	339.7 4.7	153.7 1.3	16.1 0.1	196
	2044.7 61.8	1976.0 57.8	1829.0 50.2	1608.4 40.0	1318.1 28.1	924.4 16.3	532.3 7.0	224.7 1.9	19.8 0.1	263
	2408.9 72.9	2334.7 68.4	2174.8 59.8	1937.3 48.2	1608.3 34.6	1180.1 20.7	703.9 9.2	286.5 2.5	23.0 0.2	316
-30	2680.7 81.1	2603.3 76.3	2433.4 66.9	2182.5 54.3	1836.5 39.4	1384.1 24.2	840.1 11.0	335.0 3.0	25.5 0.2	356
	2862.3 86.6	2781.5 81.5	2606.6 71.7	2345.3 58.3	1985.0 42.6	1522.5 26.5	933.9 12.3	368.5 3.3	27.4 0.3	383
	2957.7 89.5	2875.3 84.3	2696.7 74.2	2430.1 60.5	2063.7 44.3	1598.8 27.8	986.3 12.9	387.2 3.5	28.3 0.3	397
0	2965.9 89.7	2882.4 84.5	2704.1 74.4	2436.9 60.6	2069.4 44.4	1601.4 27.8	989.7 13.0	388.1 3.5	28.4 0.3	398
	2880.0 87.1	2797.8 82.0	2618.9 72.1	2358.1 58.6	1996.7 42.9	1531.5 26.7	942.9 12.4	371.3 3.3	27.7 0.3	385
	2702.2 81.7	2623.7 76.9	2452.1 67.4	2200.0 54.7	1850.6 39.8	1395.8 24.4	849.8 11.1	338.9 3.0	26.0 0.2	359
30	2435.9 73.6	2359.9 69.1	2197.3 60.4	1959.0 48.7	1626.2 35.0	1195.2 21.0	715.5 9.4	291.1 2.5	23.5 0.2	320
	2071.9 62.6	2002.7 58.6	1853.9 50.9	1634.6 40.6	1337.6 28.6	942.6 16.6	544.1 7.2	229.3 1.9	20.4 0.1	267
	1606.9 48.4	1541.3 45.1	1417.9 38.8	1219.8 30.2	956.7 20.5	652.5 11.5	351.4 4.8	157.1 1.3	16.5 0.1	201
60	893.1 27.3	845.2 25.1	765.2 21.4	647.7 16.3	500.5 10.8	320.2 5.9	213.7 2.7	75.9 0.7	12.2 0.0	110
	162.2 6.1	154.6 5.6	147.6 4.9	140.3 3.9	104.5 2.8	112.6 2.0	73.3 1.0	19.8 0.2	7.5 0.0	26
	1.1 0.1	1.1 0.1	1.7 0.1	3.5 0.1	5.2 0.2	6.3 0.2	6.1 0.1	6.4 0.0	2.6 0.0	1
90	956	896	782	628	449	271	123	33	3	4141

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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Candela trace through origin.

Vertical Trace			
Angle	Intensity (cd)	Angle	Intensity (cd)
90.0	0.17	0.0	2989.32
87.0	0.07	-3.0	2981.73
84.0	0.05	-6.0	2967.50
81.0	4.40	-9.0	2946.98
78.0	27.53	-12.0	2916.63
75.0	164.39	-15.0	2878.52
72.0	339.40	-18.0	2834.87
69.0	553.18	-21.0	2782.83
66.0	824.66	-24.0	2720.79
63.0	1072.35	-27.0	2650.83
60.0	1338.76	-30.0	2573.67
57.0	1511.12	-33.0	2487.06
54.0	1667.70	-36.0	2392.35
51.0	1815.86	-39.0	2291.22
48.0	1955.68	-42.0	2180.33
45.0	2086.65	-45.0	2058.77
42.0	2207.63	-48.0	1928.67
39.0	2314.92	-51.0	1790.65
36.0	2419.54	-54.0	1638.25
33.0	2511.12	-57.0	1480.48
30.0	2596.10	-60.0	1292.17
27.0	2673.32	-63.0	1058.20
24.0	2742.74	-66.0	879.78
21.0	2803.28	-69.0	678.96
18.0	2853.45	-72.0	500.44
15.0	2896.17	-75.0	323.73
12.0	2930.75	-78.0	184.97
9.0	2960.31	-81.0	78.31
6.0	2977.33	-84.0	22.87
3.0	2987.84	-87.0	7.01
0.0	2989.32	-90.0	1.87

Horizontal Trace			
Angle	Intensity (cd)	Angle	Intensity (cd)
90.0	0.26	0.0	2989.32
87.0	17.11	-3.0	2979.60
84.0	64.42	-6.0	2966.09
81.0	172.23	-9.0	2950.13
78.0	280.05	-12.0	2926.06
75.0	387.87	-15.0	2891.15
72.0	568.81	-18.0	2847.34
69.0	749.76	-21.0	2793.66
66.0	930.70	-24.0	2731.18
63.0	1114.42	-27.0	2662.04
60.0	1299.53	-30.0	2587.18
57.0	1484.64	-33.0	2508.18
54.0	1656.16	-36.0	2411.24
51.0	1800.49	-39.0	2308.31
48.0	1944.82	-42.0	2199.39
45.0	2075.06	-45.0	2075.06
42.0	2199.39	-48.0	1944.82
39.0	2308.31	-51.0	1800.49
36.0	2411.24	-54.0	1656.16
33.0	2508.18	-57.0	1484.64
30.0	2587.18	-60.0	1299.53
27.0	2662.04	-63.0	1114.42
24.0	2731.18	-66.0	930.70
21.0	2793.66	-69.0	749.76
18.0	2847.34	-72.0	568.81
15.0	2891.15	-75.0	387.87
12.0	2926.06	-78.0	280.05
9.0	2950.13	-81.0	172.23
6.0	2966.09	-84.0	64.42
3.0	2979.60	-87.0	17.11
0.0	2989.32	-90.0	0.26

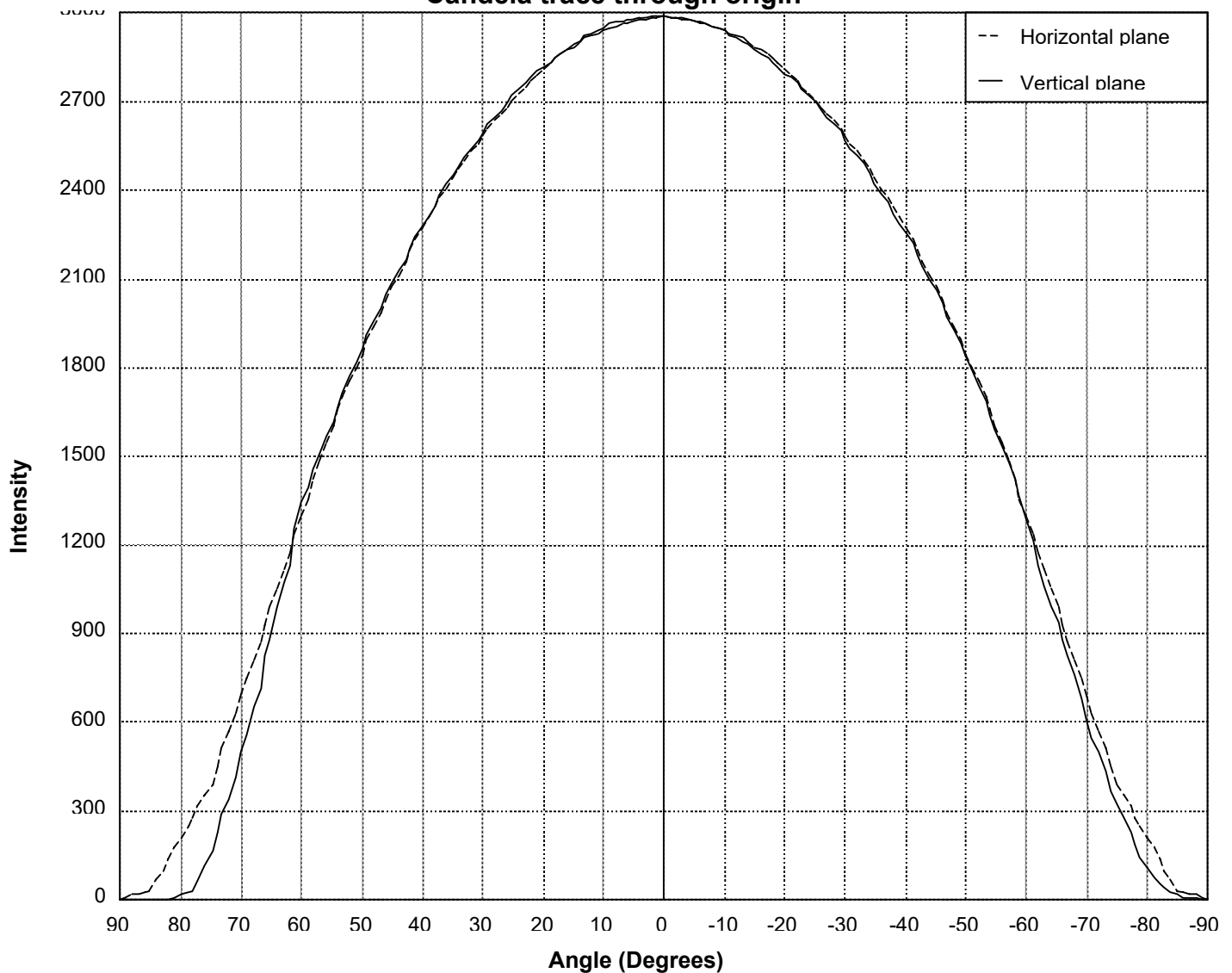
Note: Luminaire orientation as tested.
The left and right sides of photometric data have been averaged.



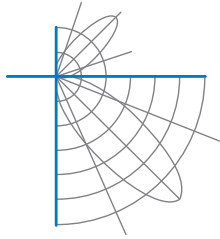
Test Report No. LLIA002372-005

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Candela trace through origin



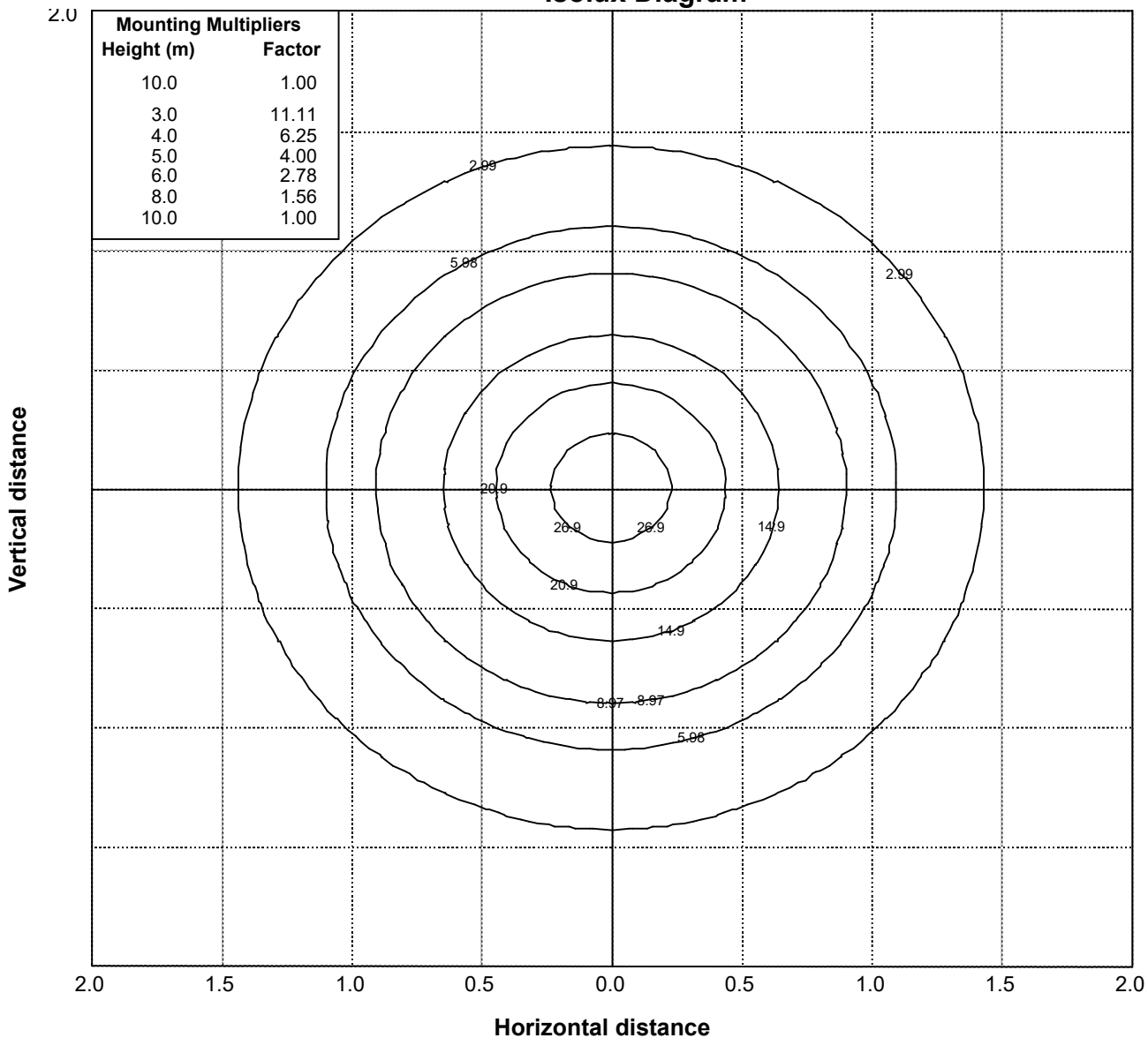
Note: The intensity units are expressed as candelas.
The left and right sides of photometric data have been averaged.
Both the vertical and the horizontal trace pass through the nadir.



Test Report No. LLIA002372-005

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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 24.7 °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.