

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: METALUX

Report Number: P393053

Luminaire Tested: **14EN-LD2-28-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393053
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-51)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-28-UNV-L93050-W2A-1-U (4000K)
Description: 1X4 ENCOUNTER, 2800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2443.1 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.27 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

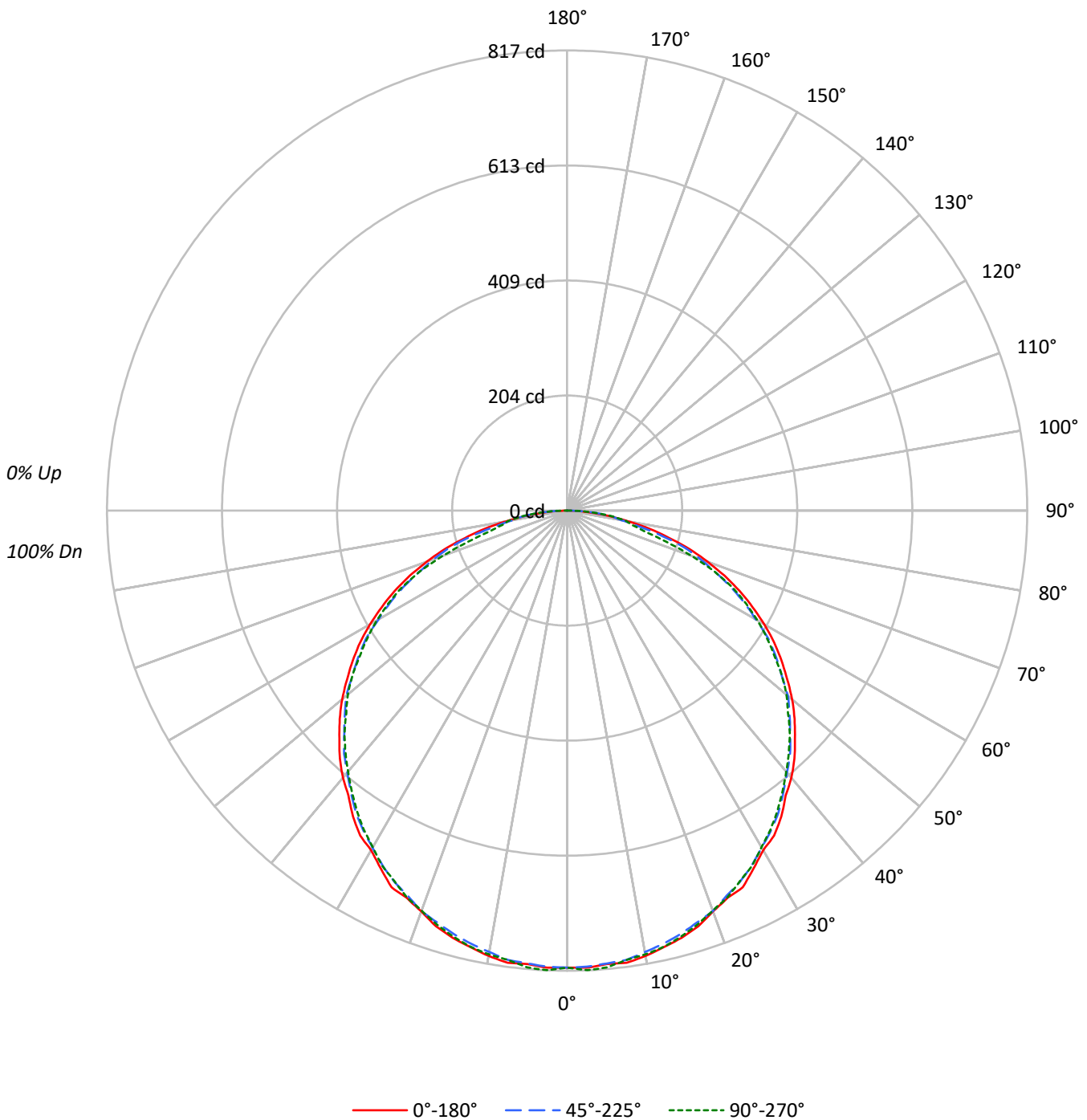
Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	53	79	68	60	53	65	58	52	63	57	52	61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	55	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2184	2184	2184
5°	2183	2180	2199
10°	2194	2175	2186
15°	2188	2168	2181
20°	2169	2166	2164
25°	2192	2158	2155
30°	2163	2147	2144
35°	2178	2149	2138
40°	2175	2133	2126
45°	2177	2131	2127
50°	2183	2143	2128
55°	2180	2123	2107
60°	2176	2083	2102
65°	2152	2041	2069
70°	2083	1980	1849
75°	1953	1826	1471
80°	1706	1503	1638
85°	1294	1646	1646



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	3.2
10°-20°	220.5	9.0
20°-30°	335.8	13.7
30°-40°	409.5	16.8
40°-50°	434.5	17.8
50°-60°	406.7	16.6
60°-70°	321.4	13.2
70°-80°	181.9	7.4
80°-90°	55.8	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	633.3	25.9
0°-40°	1042.8	42.7
0°-60°	1884.1	77.1
0°-90°	2443.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2443.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	812	812	812	812	812	
5°	808	809	807	812	814	77
15°	785	779	778	783	783	221
25°	738	730	727	725	726	338
35°	663	662	654	647	651	414
45°	572	570	560	557	559	442
55°	465	462	452	452	449	415
65°	338	334	321	325	325	333
75°	188	183	176	153	142	199
85°	42	45	53	53	53	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	811.5	811.5	811.5	811.5	811.5
2.5°	812.4	813.2	810.6	811.5	816.7
5°	808.0	808.9	807.1	812.4	814.1
7.5°	809.7	805.4	804.5	806.2	804.5
10°	802.8	801.9	795.8	797.5	800.1
12.5°	794.0	792.3	787.9	792.3	793.1
15°	785.3	779.2	778.3	782.7	782.7
17.5°	773.9	773.9	766.9	766.9	770.4
20°	757.3	760.0	756.5	756.5	755.6
22.5°	744.2	742.5	739.9	746.8	743.4
25°	738.1	730.3	726.8	725.0	725.9
27.5°	716.3	718.0	710.2	706.7	711.0
30°	696.2	695.3	690.9	692.7	690.1
32.5°	684.0	676.1	673.5	671.7	671.7
35°	663.0	662.1	654.3	647.3	650.8
37.5°	637.7	637.7	630.7	628.9	628.1
40°	619.3	613.2	607.1	608.0	605.3
42.5°	597.5	593.1	586.1	579.1	582.6
45°	572.1	569.5	559.9	557.3	559.0
47.5°	547.7	541.6	535.5	535.5	532.0
50°	521.5	516.2	511.9	506.6	508.4
52.5°	492.7	491.8	479.6	476.9	480.4
55°	464.7	462.1	452.5	452.5	449.0
57.5°	435.9	431.5	423.7	421.0	420.2
60°	404.4	399.2	387.0	384.3	390.5
62.5°	371.2	366.0	354.6	355.5	358.1
65°	338.0	333.7	320.6	324.9	324.9
67.5°	302.2	295.2	283.9	285.6	283.0
70°	264.7	260.3	251.6	242.0	235.0
72.5°	228.0	222.7	218.4	195.7	184.3
75°	187.8	182.6	175.6	152.9	141.5
77.5°	151.1	146.7	131.0	115.3	117.9
80°	110.1	115.3	97.0	103.1	105.7
82.5°	75.1	76.0	79.5	83.9	82.1
85°	41.9	45.4	53.3	53.3	53.3
87.5°	15.7	22.7	23.6	24.5	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)