

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: P393229

Luminaire Tested: **22EN-LD2-19-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393229  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22EN-LD2-19-UNV-L83050-W2A-1-U (4000K)  
Description: 2X2 ENCOUNTER, 1900 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2224.8 lumens  
Efficiency: N/A  
Efficacy: 138.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

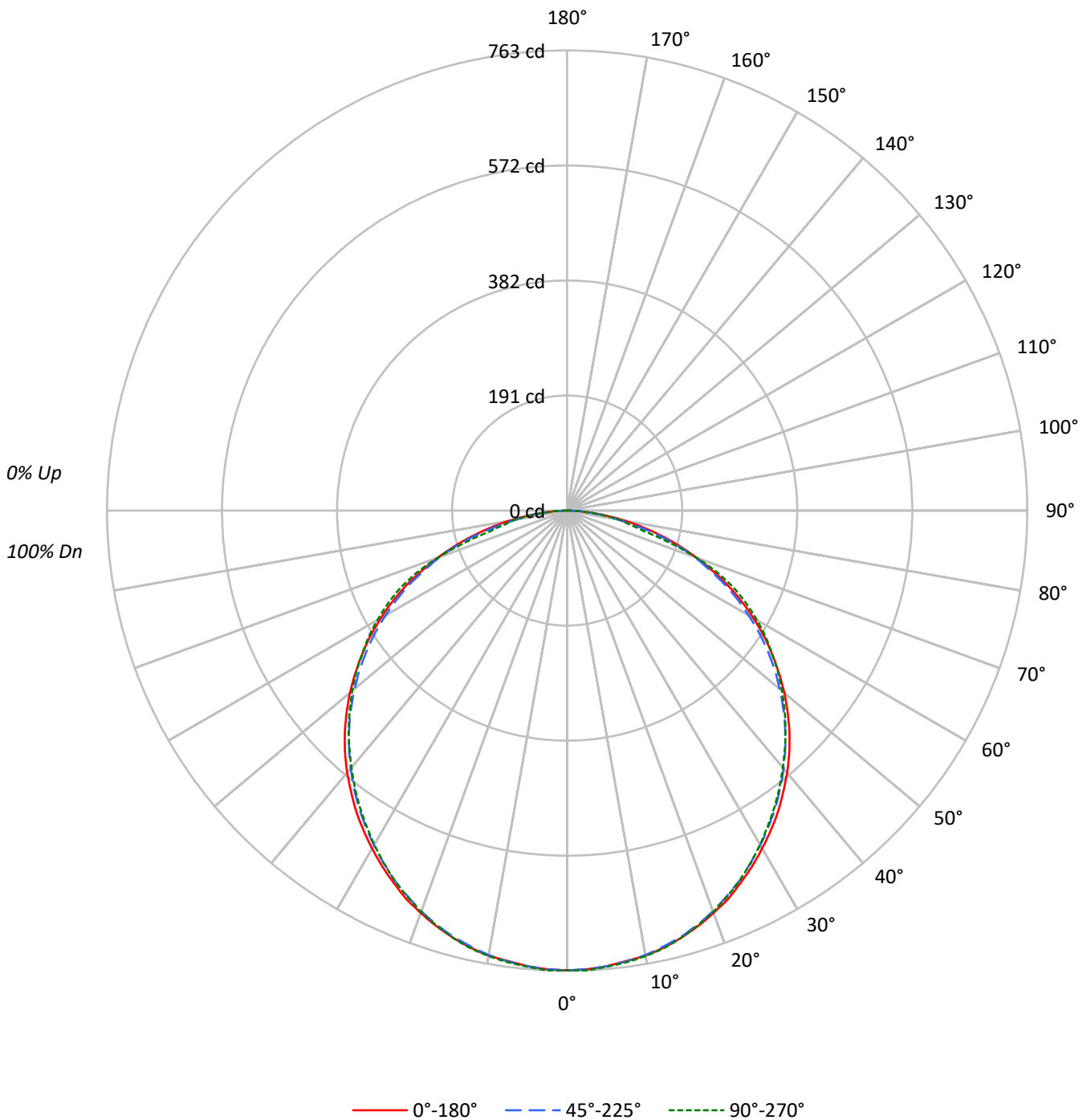
Input Watts (W): 16.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	98	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2051	2051	2051
5°	2048	2048	2051
10°	2047	2044	2050
15°	2042	2037	2042
20°	2033	2025	2027
25°	2022	2010	2010
30°	2009	1991	1988
35°	2003	1976	1969
40°	1993	1962	1955
45°	1983	1945	1949
50°	1968	1925	1947
55°	1946	1903	1946
60°	1919	1870	1956
65°	1880	1829	1950
70°	1794	1762	1794
75°	1692	1608	1379
80°	1525	1308	1385
85°	1118	1149	1118



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.1	3.2
10°-20°	206.4	9.3
20°-30°	312.1	14.0
30°-40°	377.1	17.0
40°-50°	396.0	17.8
50°-60°	366.6	16.5
60°-70°	289.1	13.0
70°-80°	161.7	7.3
80°-90°	43.7	2.0
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°	590.6	26.5
0°-40°	967.7	43.5
0°-60°	1730.3	77.8
0°-90°	2224.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2224.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	762	762	762	762	762	
5°	758	757	758	758	759	72
15°	733	731	731	731	733	207
25°	681	679	677	675	677	314
35°	610	607	602	598	600	381
45°	521	517	511	508	512	402
55°	415	412	406	408	415	371
65°	295	291	287	297	306	291
75°	163	160	155	140	133	171
85°	36	36	37	37	36	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	762.2	762.2	762.2	762.2	762.2
2.5°	761.2	760.2	761.2	761.2	763.2
5°	758.2	757.2	758.2	758.2	759.2
7.5°	753.2	753.2	754.2	754.2	755.2
10°	749.2	748.2	748.2	748.2	750.2
12.5°	742.1	740.1	740.1	741.1	743.1
15°	733.1	731.1	731.1	731.1	733.1
17.5°	722.1	721.1	720.0	720.0	721.1
20°	710.0	708.0	707.0	707.0	708.0
22.5°	697.0	693.9	691.9	690.9	692.9
25°	680.9	678.9	676.9	674.9	676.9
27.5°	664.8	661.8	658.8	656.8	658.8
30°	646.7	644.7	640.7	637.7	639.7
32.5°	628.7	626.7	621.6	618.6	619.6
35°	609.6	606.6	601.5	597.5	599.5
37.5°	588.5	586.5	580.5	576.4	578.4
40°	567.4	564.4	558.4	554.3	556.4
42.5°	545.3	541.3	535.3	531.2	534.3
45°	521.2	517.2	511.2	508.2	512.2
47.5°	496.1	492.1	486.1	484.0	489.1
50°	470.0	467.0	459.9	459.9	465.0
52.5°	442.9	438.9	433.8	434.8	440.9
55°	414.8	411.7	405.7	407.7	414.8
57.5°	386.6	382.6	377.6	381.6	390.7
60°	356.5	352.5	347.5	354.5	363.5
62.5°	326.4	322.4	318.3	326.4	335.4
65°	295.2	291.2	287.2	297.3	306.3
67.5°	261.1	257.1	254.1	264.1	271.1
70°	228.0	223.9	223.9	225.0	228.0
72.5°	194.8	192.8	190.8	183.8	179.8
75°	162.7	159.7	154.7	139.6	132.6
77.5°	129.5	126.5	117.5	104.4	105.4
80°	98.4	95.4	84.4	87.4	89.4
82.5°	66.3	65.3	62.3	61.3	61.3
85°	36.2	36.2	37.2	37.2	36.2
87.5°	15.1	15.1	16.1	16.1	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)