

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: P392990

Luminaire Tested: **14EN-LD2-18-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392990
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-49)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-18-UNV-L93050-W2A-1-U (4500K)
Description: 1X4 ENCOUNTER, 1800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1537.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

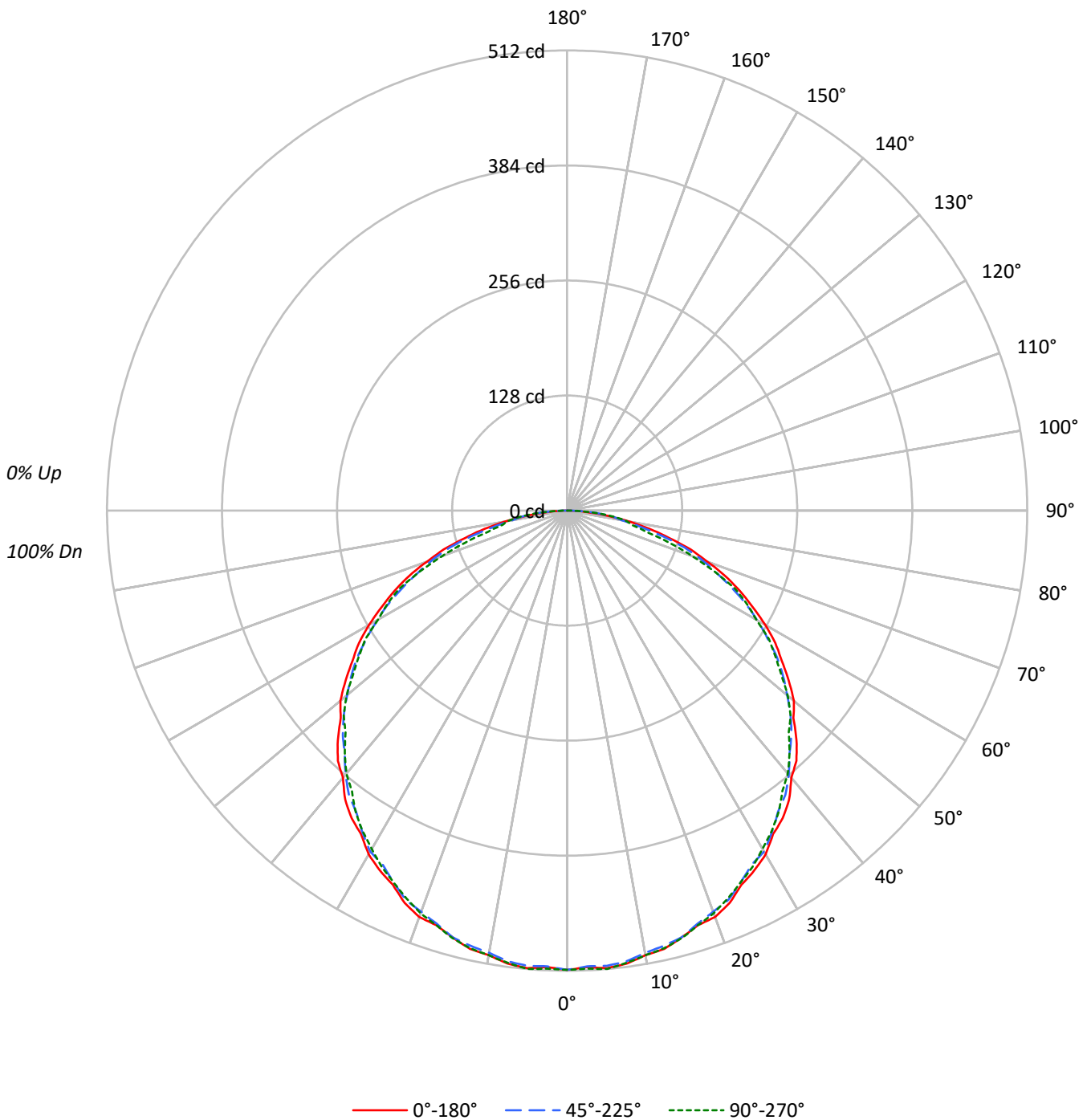
Input Watts (W): 17
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1375	1375	1375
5°	1380	1373	1383
10°	1373	1365	1373
15°	1370	1370	1372
20°	1378	1360	1365
25°	1363	1356	1356
30°	1372	1362	1351
35°	1373	1344	1347
40°	1363	1348	1342
45°	1373	1343	1327
50°	1379	1338	1342
55°	1368	1339	1326
60°	1370	1314	1309
65°	1353	1280	1314
70°	1306	1250	1168
75°	1224	1142	949
80°	1075	953	1034
85°	787	1031	1031



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.4	3.1
10°-20°	138.8	9.0
20°-30°	211.3	13.7
30°-40°	257.8	16.8
40°-50°	273.3	17.8
50°-60°	255.6	16.6
60°-70°	202.2	13.2
70°-80°	114.8	7.5
80°-90°	34.8	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°	398.5	25.9
0°-40°	656.3	42.7
0°-60°	1185.2	77.1
0°-90°	1537.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1537.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	511	511	511	511	511	
5°	511	509	508	508	512	48
15°	492	491	492	488	493	139
25°	459	460	457	460	457	213
35°	418	415	409	411	410	261
45°	361	356	353	350	349	278
55°	292	290	285	282	283	262
65°	212	209	201	203	206	209
75°	118	115	110	98	91	125
85°	26	28	33	33	33	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	511.0	511.0	511.0	511.0	511.0
2.5°	508.4	512.8	507.5	514.6	510.2
5°	511.0	509.3	508.4	508.4	511.9
7.5°	508.4	505.8	505.8	504.0	507.5
10°	502.3	505.8	499.6	506.7	502.3
12.5°	499.6	497.0	496.1	496.1	498.8
15°	491.7	490.8	491.7	488.2	492.6
17.5°	483.8	488.2	482.1	488.2	483.8
20°	481.2	478.6	475.0	476.8	476.8
22.5°	472.4	467.1	468.9	465.4	467.1
25°	459.2	460.1	456.6	460.1	456.6
27.5°	451.3	450.5	444.3	446.9	446.9
30°	441.7	437.3	438.2	432.0	434.7
32.5°	426.7	426.7	424.1	424.1	423.2
35°	418.0	415.3	409.2	410.9	410.1
37.5°	405.7	399.5	398.7	393.4	393.4
40°	388.1	387.2	383.7	381.1	382.0
42.5°	377.6	374.1	366.2	367.9	366.2
45°	360.9	356.5	353.0	349.5	348.6
47.5°	341.6	341.6	337.2	334.6	337.2
50°	329.3	326.6	319.6	319.6	320.5
52.5°	310.8	307.3	302.9	300.3	300.3
55°	291.5	289.8	285.4	281.9	282.7
57.5°	274.8	271.3	264.3	264.3	266.1
60°	254.6	251.1	244.1	243.2	243.2
62.5°	232.7	230.9	223.9	223.0	225.7
65°	212.5	209.0	201.1	202.8	206.3
67.5°	190.5	185.3	179.1	180.9	177.4
70°	166.0	163.3	158.9	152.8	148.4
72.5°	144.0	139.6	137.0	124.7	119.4
75°	117.7	115.0	109.8	97.5	91.3
77.5°	94.0	92.2	83.4	72.9	73.8
80°	69.4	72.0	61.5	64.1	66.7
82.5°	46.5	47.4	50.1	52.7	52.7
85°	25.5	28.1	33.4	33.4	33.4
87.5°	10.5	13.2	14.9	14.9	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)