

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: P393210

Luminaire Tested: **14EN-LD2-51-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393210
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-56)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-51-UNV-L93050-W2A-1-U (2700K)
Description: 1X4 ENCOUNTER, 5100 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4387.8 lumens
Efficiency: N/A
Efficacy: 86.4 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

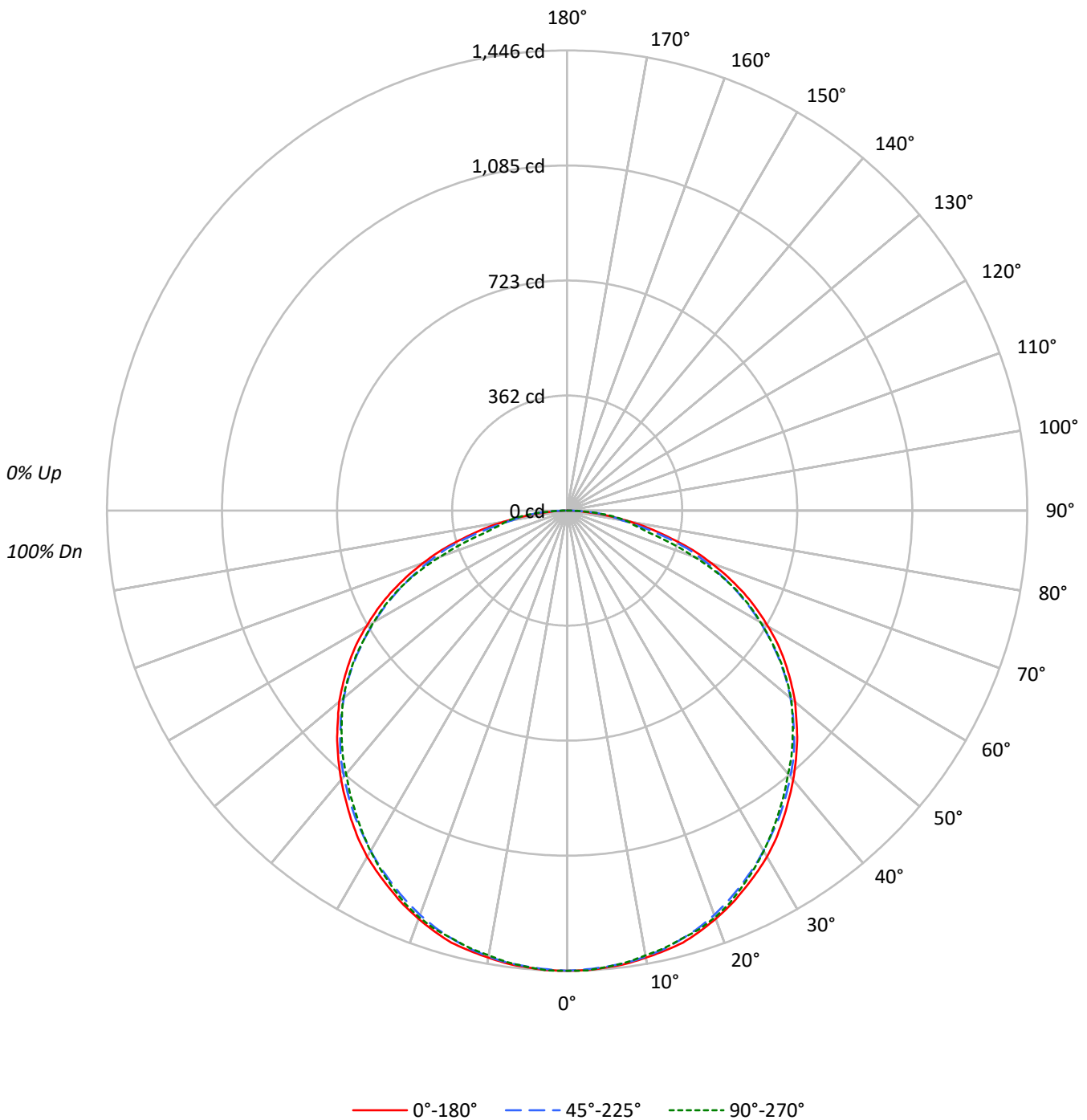
Input Watts (W): 50.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57					57			
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48					48			
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	54	49	44	42					42			
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3892	3892	3892
5°	3893	3886	3888
10°	3898	3888	3879
15°	3916	3882	3880
20°	3909	3872	3894
25°	3902	3851	3869
30°	3904	3837	3839
35°	3889	3832	3806
40°	3882	3831	3795
45°	3890	3838	3815
50°	3915	3835	3846
55°	3929	3812	3828
60°	3922	3768	3778
65°	3898	3689	3711
70°	3791	3587	3356
75°	3528	3303	2747
80°	3118	2729	2983
85°	2238	2933	2986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	3.1
10°-20°	394.2	9.0
20°-30°	599.9	13.7
30°-40°	732.8	16.7
40°-50°	780.5	17.8
50°-60°	732.0	16.7
60°-70°	581.0	13.2
70°-80°	330.7	7.5
80°-90°	99.6	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°	1131.3	25.8
0°-40°	1864.1	42.5
0°-60°	3376.6	77.0
0°-90°	4387.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4387.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1441	1445	1438	1448	1439	137
15°	1406	1400	1394	1395	1393	396
25°	1314	1302	1297	1294	1303	606
35°	1184	1178	1166	1165	1159	741
45°	1022	1021	1008	1002	1002	789
55°	838	830	812	809	816	748
65°	612	600	579	584	583	604
75°	339	331	318	282	264	361
85°	72	81	95	94	97	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1446.2	1446.2	1446.2	1446.2	1446.2
2.5°	1445.4	1451.4	1442.8	1449.7	1446.2
5°	1441.1	1445.4	1438.5	1448.0	1439.3
7.5°	1435.9	1438.5	1433.3	1441.9	1431.6
10°	1426.4	1428.1	1422.9	1429.8	1419.5
12.5°	1416.9	1414.3	1410.8	1413.4	1408.3
15°	1405.7	1399.6	1393.6	1395.3	1392.7
17.5°	1386.7	1378.9	1374.6	1372.9	1379.8
20°	1365.1	1355.6	1352.1	1350.4	1359.9
22.5°	1341.8	1329.7	1325.4	1323.6	1334.9
25°	1314.1	1302.1	1296.9	1294.3	1302.9
27.5°	1285.6	1272.7	1266.7	1264.9	1271.0
30°	1256.3	1241.6	1234.7	1233.8	1235.6
32.5°	1221.8	1210.5	1200.2	1201.0	1197.6
35°	1183.8	1177.7	1166.5	1164.8	1158.7
37.5°	1144.0	1144.0	1129.4	1132.0	1120.7
40°	1105.2	1106.1	1090.5	1091.4	1080.2
42.5°	1063.7	1066.3	1053.4	1046.5	1043.9
45°	1022.3	1020.6	1008.5	1001.6	1002.4
47.5°	977.4	977.4	963.6	957.5	960.1
50°	935.1	931.6	916.1	910.9	918.7
52.5°	886.7	882.4	866.9	860.8	868.6
55°	837.5	829.8	812.5	809.0	815.9
57.5°	786.6	776.2	757.2	755.5	759.0
60°	728.7	720.1	700.2	696.8	702.0
62.5°	672.6	660.5	640.7	640.7	645.8
65°	612.2	600.1	579.4	583.7	582.8
67.5°	548.3	536.2	518.1	519.8	510.3
70°	481.8	468.0	455.9	439.5	426.5
72.5°	414.4	399.8	395.5	357.5	344.5
75°	339.3	330.7	317.7	281.5	264.2
77.5°	272.8	264.2	240.9	213.3	217.6
80°	201.2	202.9	176.1	186.5	192.5
82.5°	132.1	136.4	142.5	150.2	152.0
85°	72.5	81.2	95.0	94.1	96.7
87.5°	28.5	38.0	41.4	43.2	40.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)