

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: P393474

Luminaire Tested: **24EN-LD2-40-UNV-L82765-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393474
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-33)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-40-UNV-L82765-W2A-1-U (2700K)
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3679.7 lumens
Efficiency: N/A
Efficacy: 131.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

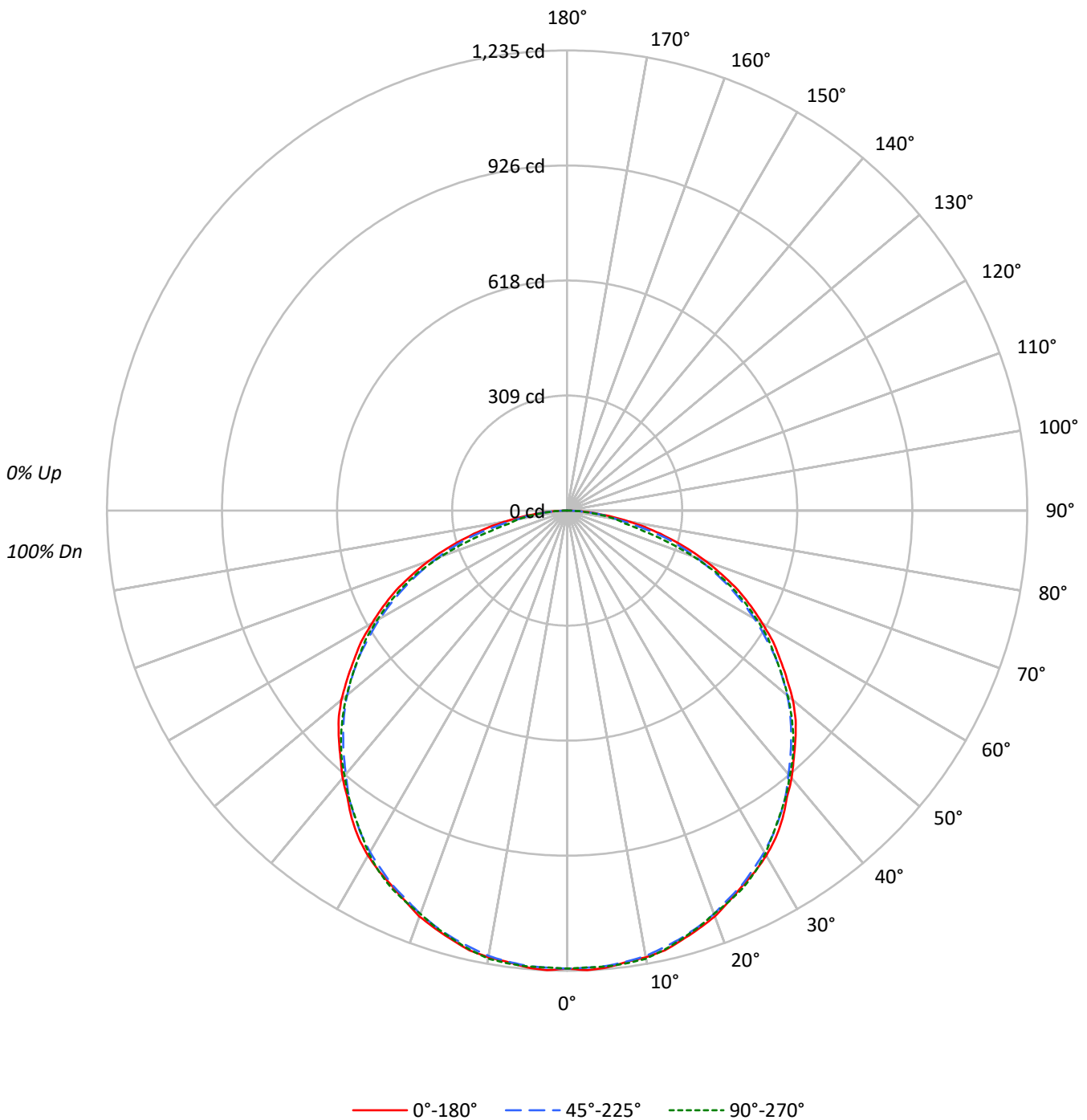
Input Watts (W): 28.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	36	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1654	1654	1654
5°	1662	1656	1659
10°	1663	1658	1668
15°	1662	1654	1658
20°	1660	1649	1649
25°	1651	1647	1659
30°	1661	1644	1653
35°	1656	1638	1635
40°	1647	1623	1632
45°	1649	1618	1634
50°	1656	1614	1618
55°	1639	1596	1598
60°	1628	1562	1587
65°	1614	1518	1553
70°	1555	1454	1415
75°	1455	1355	1105
80°	1296	1049	1034
85°	1024	968	869



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.7	3.2
10°-20°	335.4	9.1
20°-30°	512.2	13.9
30°-40°	624.9	17.0
40°-50°	659.8	17.9
50°-60°	611.8	16.6
60°-70°	479.2	13.0
70°-80°	268.2	7.3
80°-90°	71.6	1.9
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°	964.3	26.2
0°-40°	1589.2	43.2
0°-60°	2860.7	77.7
0°-90°	3679.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3679.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1229	1229	1229	1229	1229	
5°	1231	1231	1226	1227	1228	117
15°	1193	1187	1187	1185	1190	337
25°	1112	1112	1109	1107	1117	514
35°	1008	999	998	996	996	630
45°	867	858	850	848	858	669
55°	699	690	680	680	681	625
65°	507	492	477	480	488	498
75°	280	272	261	226	213	297
85°	66	64	63	59	56	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1229.1	1229.1	1229.1	1229.1	1229.1
2.5°	1234.6	1231.8	1228.2	1229.1	1227.3
5°	1230.9	1230.9	1226.4	1227.3	1228.2
7.5°	1221.8	1222.7	1220.9	1217.3	1225.5
10°	1217.3	1210.9	1213.7	1206.4	1220.9
12.5°	1209.1	1199.1	1200.9	1195.5	1207.3
15°	1192.8	1187.3	1187.3	1184.6	1190.0
17.5°	1176.4	1172.8	1171.0	1172.8	1172.8
20°	1159.2	1156.4	1151.9	1155.5	1151.9
22.5°	1134.6	1136.4	1129.2	1137.4	1135.5
25°	1111.9	1111.9	1109.2	1107.4	1117.4
27.5°	1091.9	1085.6	1083.8	1080.1	1092.8
30°	1069.2	1057.4	1058.3	1052.9	1063.8
32.5°	1042.0	1028.3	1029.3	1023.8	1028.3
35°	1008.4	999.3	997.5	996.5	995.6
37.5°	969.3	968.4	963.8	966.6	964.8
40°	937.5	935.7	923.9	926.6	929.3
42.5°	900.3	897.5	887.5	889.4	896.6
45°	866.6	858.5	850.3	848.5	858.5
47.5°	832.1	819.4	812.1	806.7	816.7
50°	791.2	780.3	771.3	765.8	773.1
52.5°	744.0	734.9	725.8	724.0	726.7
55°	698.6	689.5	680.4	680.4	681.3
57.5°	655.0	643.2	629.5	632.3	639.5
60°	605.0	594.1	580.5	580.5	589.6
62.5°	556.0	542.3	528.7	530.5	539.6
65°	506.9	491.5	476.9	479.7	487.8
67.5°	450.6	437.0	423.3	427.0	431.5
70°	395.2	381.5	369.7	366.1	359.7
72.5°	338.8	327.9	318.0	298.0	288.0
75°	279.8	271.6	260.7	226.2	212.6
77.5°	225.3	218.9	194.4	162.6	158.1
80°	167.2	167.2	135.4	132.6	133.5
82.5°	113.6	111.7	102.7	96.3	93.6
85°	66.3	63.6	62.7	59.0	56.3
87.5°	21.8	25.4	25.4	24.5	25.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)