

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: P345100

Luminaire Tested: **24CZ-55SE-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345100
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1905-313-5)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-55SE-L840-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4797.6 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

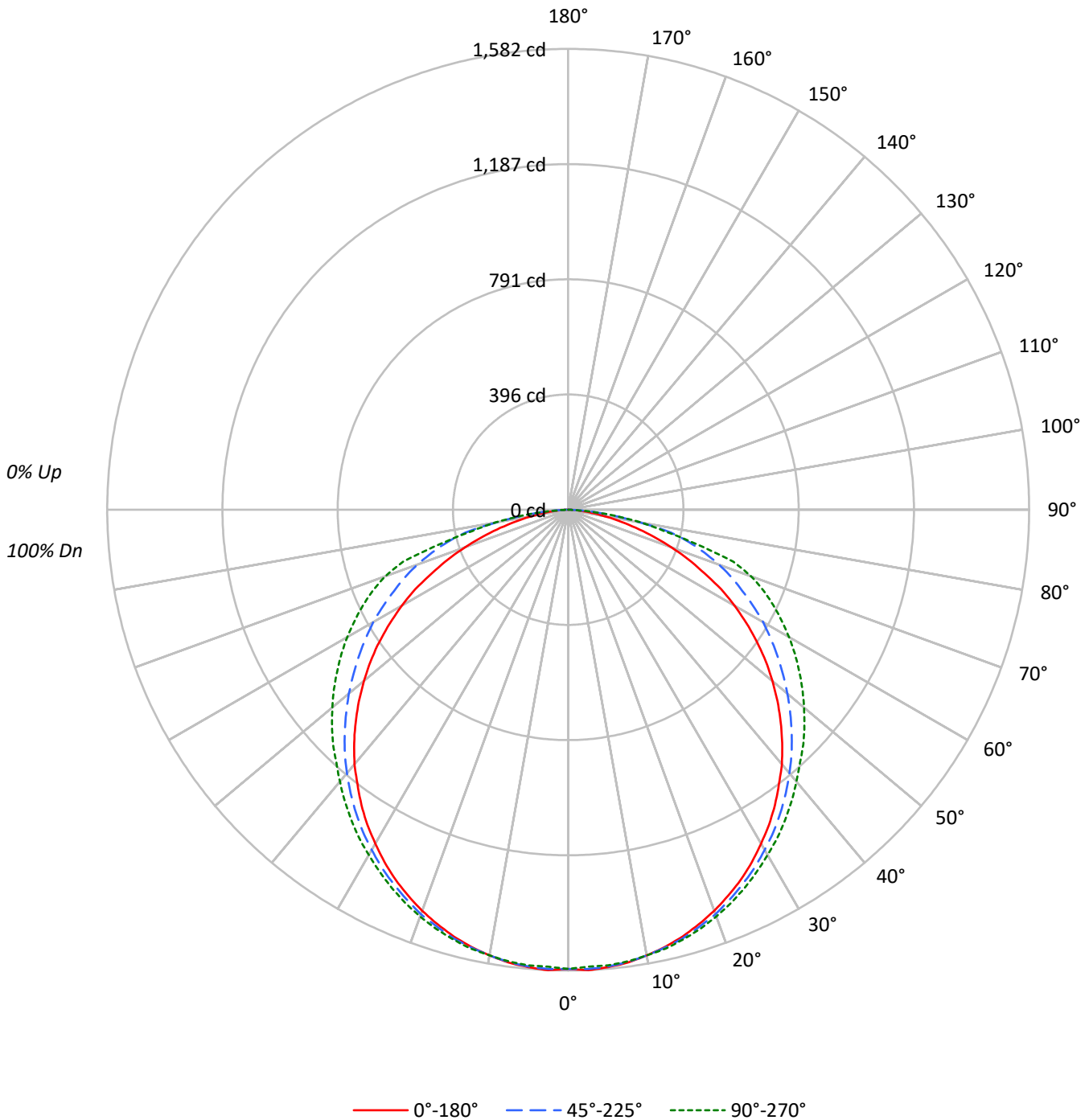
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	74	81	76	72	77	74	70	68
3	89	78	70	63	86	76	69	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	52	65	58	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	45	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	41	34	48	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2121	2121	2121
5°	2129	2126	2121
10°	2123	2123	2123
15°	2113	2121	2127
20°	2098	2116	2128
25°	2081	2105	2127
30°	2056	2095	2126
35°	2032	2086	2133
40°	2003	2076	2141
45°	1963	2065	2170
50°	1914	2056	2211
55°	1856	2058	2271
60°	1775	2079	2356
65°	1642	2100	2473
70°	1480	2167	2627
75°	1250	2233	2350
80°	972	1911	1974
85°	698	1301	1142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.4	3.1
10°-20°	429.0	8.9
20°-30°	652.5	13.6
30°-40°	792.7	16.5
40°-50°	836.6	17.4
50°-60°	786.1	16.4
60°-70°	647.2	13.5
70°-80°	407.7	8.5
80°-90°	96.3	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°	1230.9	25.7
0°-40°	2023.6	42.2
0°-60°	3646.4	76.0
0°-90°	4797.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4797.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1576	1576	1576	1576	1576	
5°	1576	1568	1574	1572	1570	150
15°	1517	1510	1523	1527	1527	428
25°	1402	1400	1418	1426	1432	646
35°	1237	1243	1270	1286	1299	773
45°	1032	1048	1085	1116	1141	795
55°	791	820	878	939	968	706
65°	516	565	660	744	777	512
75°	240	314	430	469	452	257
85°	45	76	84	78	74	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1576.3	1576.3	1576.3	1576.3	1576.3
2.5°	1582.5	1572.2	1578.3	1576.3	1570.1
5°	1576.3	1568.1	1574.2	1572.2	1570.1
7.5°	1568.1	1559.8	1566.0	1564.0	1564.0
10°	1553.7	1547.5	1553.7	1553.7	1553.7
12.5°	1537.2	1531.1	1539.3	1541.3	1543.4
15°	1516.7	1510.5	1522.9	1527.0	1527.0
17.5°	1492.0	1487.9	1500.2	1504.4	1508.5
20°	1465.3	1463.3	1477.6	1481.8	1485.9
22.5°	1434.5	1434.5	1448.9	1453.0	1461.2
25°	1401.6	1399.5	1418.0	1426.3	1432.4
27.5°	1364.6	1364.6	1385.2	1395.4	1401.6
30°	1323.5	1327.6	1348.2	1360.5	1368.7
32.5°	1282.4	1286.5	1311.2	1325.6	1335.8
35°	1237.2	1243.4	1270.1	1286.5	1298.8
37.5°	1187.9	1198.1	1226.9	1245.4	1259.8
40°	1140.6	1148.8	1181.7	1202.3	1218.7
42.5°	1087.2	1101.6	1134.4	1159.1	1177.6
45°	1031.7	1048.1	1085.1	1115.9	1140.6
47.5°	974.1	994.7	1033.7	1074.8	1099.5
50°	914.5	937.1	982.4	1031.7	1056.3
52.5°	854.9	879.6	928.9	986.5	1013.2
55°	791.2	820.0	877.5	939.2	968.0
57.5°	725.5	758.3	824.1	894.0	922.8
60°	659.7	694.6	772.7	842.6	875.5
62.5°	591.9	630.9	715.2	795.3	826.2
65°	515.8	565.2	659.7	744.0	776.8
67.5°	446.0	497.3	606.3	690.5	725.5
70°	376.1	435.7	550.8	635.0	667.9
72.5°	306.2	376.1	489.1	575.4	593.9
75°	240.5	314.4	429.5	468.6	452.1
77.5°	176.7	258.9	361.7	341.2	337.0
80°	125.4	205.5	246.6	248.7	254.8
82.5°	80.2	152.1	160.3	162.4	164.4
85°	45.2	76.0	84.3	78.1	74.0
87.5°	20.6	24.7	20.6	14.4	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)