

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: P345098

Luminaire Tested: **24CZ-55SE-L830-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345098  
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-L830-HRP-UNV-CD1-U  
Description: CRUZE 2X4 WITH HRP LENS INSERT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4660.1 lumens  
Efficiency: N/A  
Efficacy: 85.2 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

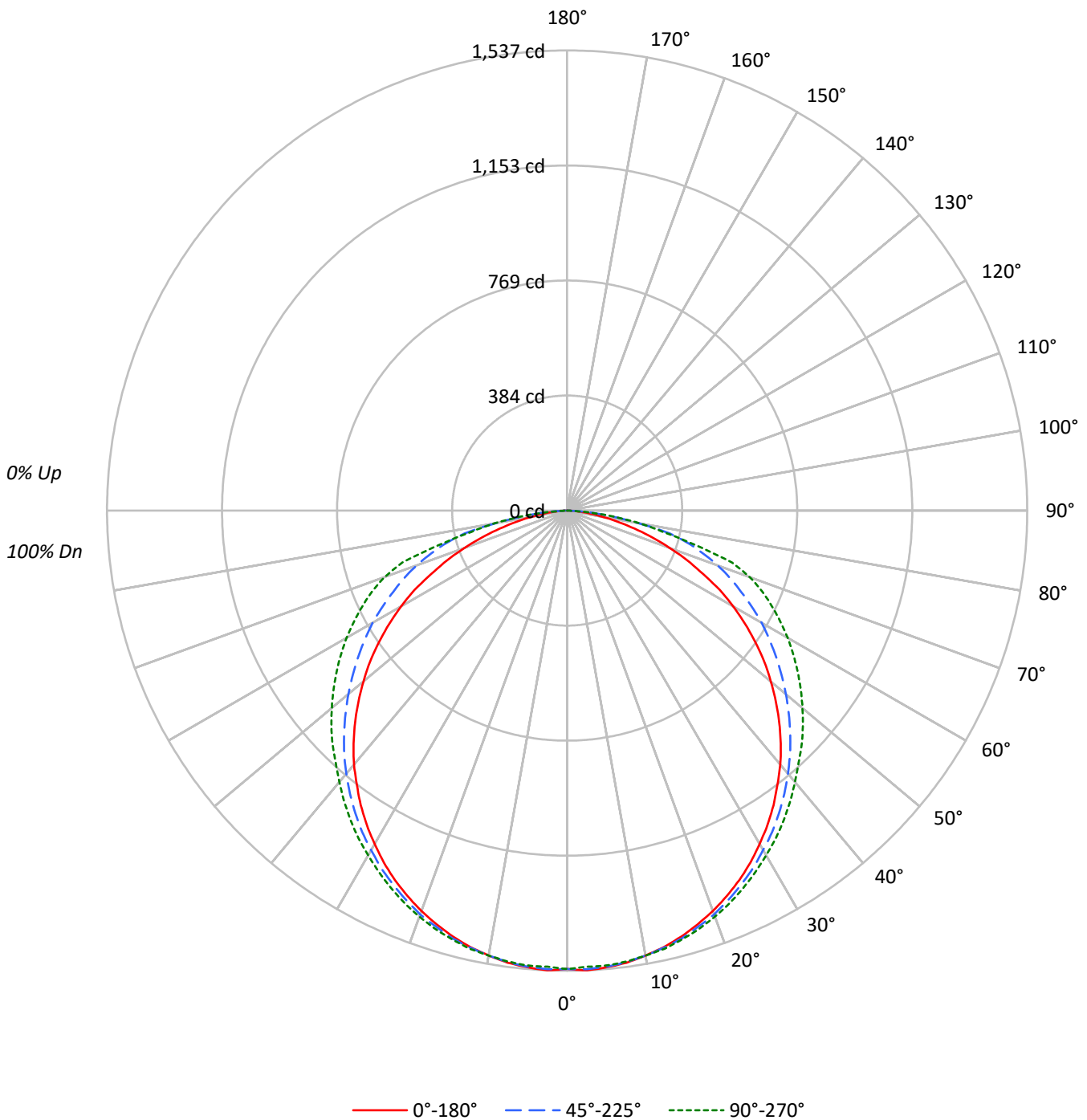
Input Watts (W): 54.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2060	2060	2060
5°	2068	2065	2060
10°	2062	2062	2062
15°	2052	2060	2066
20°	2038	2055	2067
25°	2021	2045	2066
30°	1997	2034	2066
35°	1974	2026	2072
40°	1946	2016	2079
45°	1907	2006	2108
50°	1859	1997	2148
55°	1803	2000	2206
60°	1724	2020	2288
65°	1595	2040	2402
70°	1437	2105	2552
75°	1214	2169	2283
80°	944	1856	1918
85°	678	1263	1110



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.1	3.1
10°-20°	416.7	8.9
20°-30°	633.8	13.6
30°-40°	770.0	16.5
40°-50°	812.7	17.4
50°-60°	763.6	16.4
60°-70°	628.6	13.5
70°-80°	396.0	8.5
80°-90°	93.5	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°	1195.6	25.7
0°-40°	1965.6	42.2
0°-60°	3541.9	76.0
0°-90°	4660.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4660.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1531	1531	1531	1531	1531	
5°	1531	1523	1529	1527	1525	145
15°	1473	1467	1479	1483	1483	416
25°	1361	1359	1377	1385	1391	627
35°	1202	1208	1234	1250	1262	751
45°	1002	1018	1054	1084	1108	773
55°	768	796	852	912	940	686
65°	501	549	641	723	755	498
75°	234	305	417	455	439	249
85°	44	74	82	76	72	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1531.1	1531.1	1531.1	1531.1	1531.1
2.5°	1537.1	1527.1	1533.1	1531.1	1525.1
5°	1531.1	1523.1	1529.1	1527.1	1525.1
7.5°	1523.1	1515.1	1521.1	1519.1	1519.1
10°	1509.1	1503.2	1509.1	1509.1	1509.1
12.5°	1493.2	1487.2	1495.2	1497.2	1499.2
15°	1473.2	1467.2	1479.2	1483.2	1483.2
17.5°	1449.3	1445.3	1457.2	1461.2	1465.2
20°	1423.3	1421.3	1435.3	1439.3	1443.3
22.5°	1393.4	1393.4	1407.3	1411.3	1419.3
25°	1361.4	1359.4	1377.4	1385.4	1391.4
27.5°	1325.5	1325.5	1345.5	1355.4	1361.4
30°	1285.6	1289.6	1309.5	1321.5	1329.5
32.5°	1245.6	1249.6	1273.6	1287.6	1297.5
35°	1201.7	1207.7	1233.7	1249.6	1261.6
37.5°	1153.8	1163.8	1191.7	1209.7	1223.7
40°	1107.9	1115.9	1147.8	1167.8	1183.8
42.5°	1056.0	1070.0	1101.9	1125.9	1143.8
45°	1002.1	1018.1	1054.0	1084.0	1107.9
47.5°	946.2	966.2	1004.1	1044.0	1068.0
50°	888.3	910.3	954.2	1002.1	1026.1
52.5°	830.4	854.4	902.3	958.2	984.1
55°	768.5	796.5	852.4	912.3	940.2
57.5°	704.7	736.6	800.5	868.4	896.3
60°	640.8	674.7	750.6	818.5	850.4
62.5°	574.9	612.8	694.7	772.5	802.5
65°	501.1	549.0	640.8	722.6	754.6
67.5°	433.2	483.1	588.9	670.7	704.7
70°	365.3	423.2	535.0	616.8	648.8
72.5°	297.4	365.3	475.1	558.9	576.9
75°	233.6	305.4	417.2	455.1	439.2
77.5°	171.7	251.5	351.3	331.4	327.4
80°	121.8	199.6	239.5	241.5	247.5
82.5°	77.9	147.7	155.7	157.7	159.7
85°	43.9	73.9	81.8	75.9	71.9
87.5°	20.0	24.0	20.0	14.0	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)