

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: P345106

Luminaire Tested: **24CZ-65SE-L830-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345106
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-65SE-L830-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5223.7 lumens
Efficiency: N/A
Efficacy: 87.6 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

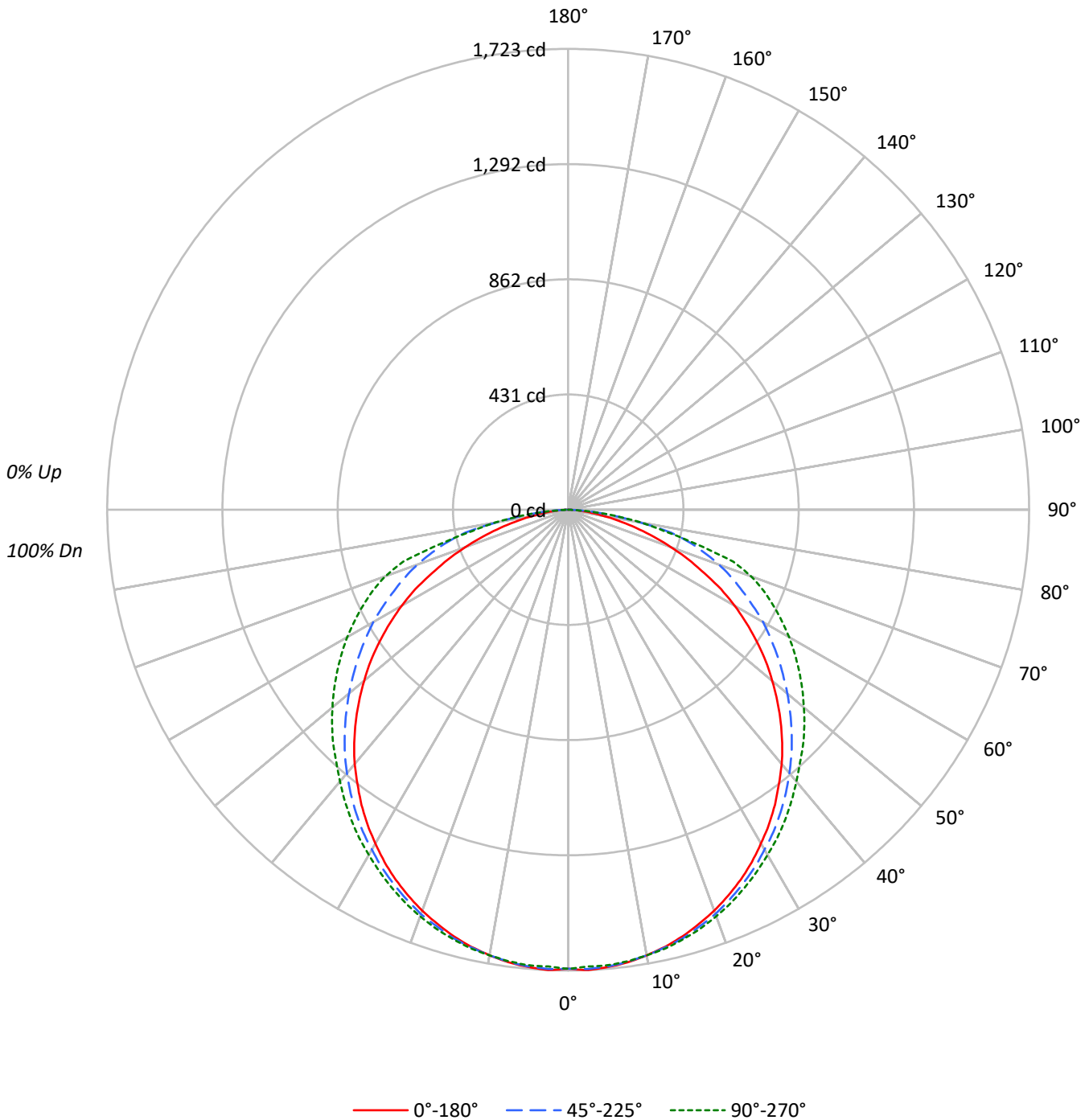
Input Watts (W): 59.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2309	2309	2309
5°	2318	2315	2309
10°	2311	2311	2311
15°	2300	2310	2316
20°	2285	2304	2316
25°	2266	2292	2316
30°	2239	2281	2315
35°	2213	2271	2323
40°	2181	2260	2331
45°	2137	2248	2363
50°	2084	2239	2408
55°	2021	2241	2472
60°	1933	2264	2565
65°	1788	2287	2693
70°	1611	2359	2861
75°	1361	2431	2559
80°	1058	2080	2150
85°	760	1416	1244



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.7	3.1
10°-20°	467.1	8.9
20°-30°	710.4	13.6
30°-40°	863.1	16.5
40°-50°	911.0	17.4
50°-60°	856.0	16.4
60°-70°	704.7	13.5
70°-80°	444.0	8.5
80°-90°	104.8	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°	1340.2	25.7
0°-40°	2203.3	42.2
0°-60°	3970.3	76.0
0°-90°	5223.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5223.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1716	1716	1716	1716	1716	
5°	1716	1707	1714	1712	1710	163
15°	1651	1645	1658	1663	1663	466
25°	1526	1524	1544	1553	1560	703
35°	1347	1354	1383	1401	1414	842
45°	1123	1141	1182	1215	1242	866
55°	862	893	956	1023	1054	769
65°	562	615	718	810	846	558
75°	262	342	468	510	492	279
85°	49	83	92	85	81	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1716.3	1716.3	1716.3	1716.3	1716.3
2.5°	1723.0	1711.8	1718.5	1716.3	1709.6
5°	1716.3	1707.3	1714.1	1711.8	1709.6
7.5°	1707.3	1698.4	1705.1	1702.9	1702.9
10°	1691.7	1685.0	1691.7	1691.7	1691.7
12.5°	1673.8	1667.1	1676.0	1678.2	1680.5
15°	1651.4	1644.7	1658.1	1662.6	1662.6
17.5°	1624.5	1620.1	1633.5	1638.0	1642.4
20°	1595.5	1593.2	1608.9	1613.4	1617.8
22.5°	1561.9	1561.9	1577.6	1582.0	1591.0
25°	1526.1	1523.8	1544.0	1552.9	1559.7
27.5°	1485.8	1485.8	1508.2	1519.4	1526.1
30°	1441.1	1445.5	1467.9	1481.3	1490.3
32.5°	1396.3	1400.8	1427.6	1443.3	1454.5
35°	1347.1	1353.8	1382.9	1400.8	1414.2
37.5°	1293.4	1304.6	1335.9	1356.0	1371.7
40°	1241.9	1250.9	1286.7	1309.0	1326.9
42.5°	1183.7	1199.4	1235.2	1262.0	1282.2
45°	1123.3	1141.2	1181.5	1215.1	1241.9
47.5°	1060.7	1083.0	1125.5	1170.3	1197.2
50°	995.8	1020.4	1069.6	1123.3	1150.2
52.5°	930.9	957.7	1011.4	1074.1	1103.2
55°	861.5	892.8	955.5	1022.6	1053.9
57.5°	789.9	825.7	897.3	973.4	1004.7
60°	718.3	756.3	841.4	917.4	953.2
62.5°	644.4	687.0	778.7	866.0	899.5
65°	561.7	615.4	718.3	810.0	845.8
67.5°	485.6	541.5	660.1	751.9	789.9
70°	409.5	474.4	599.7	691.4	727.2
72.5°	333.4	409.5	532.6	626.5	646.7
75°	261.8	342.4	467.7	510.2	492.3
77.5°	192.4	281.9	393.8	371.5	367.0
80°	136.5	223.8	268.5	270.8	277.5
82.5°	87.3	165.6	174.5	176.8	179.0
85°	49.2	82.8	91.7	85.0	80.6
87.5°	22.4	26.9	22.4	15.7	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)