

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: P345107

Luminaire Tested: **24CZ-65SE-L835-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345107
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-L835-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5548.8 lumens
Efficiency: N/A
Efficacy: 93.1 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

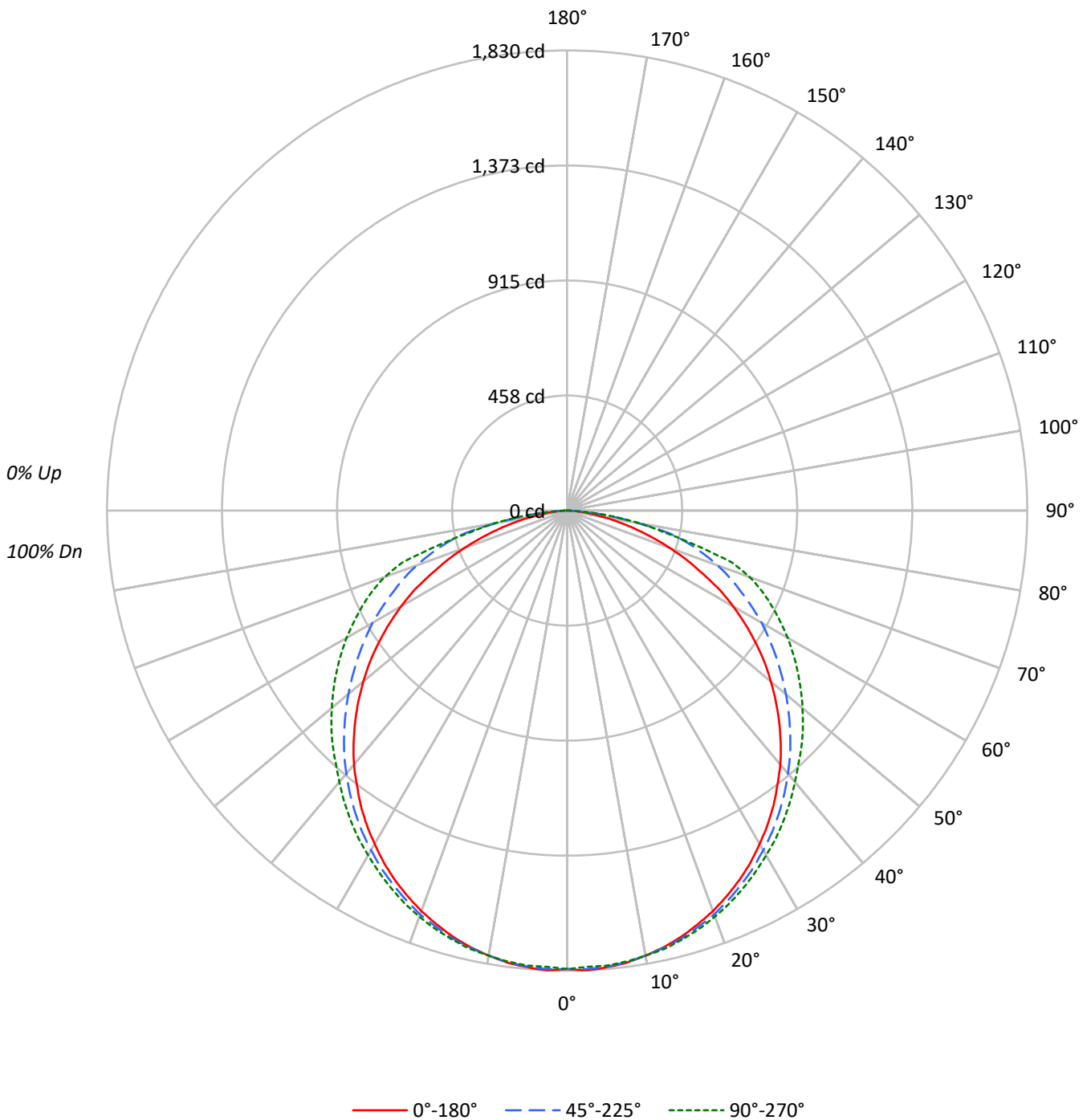
Input Watts (W): 59.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2453	2453	2453
5°	2462	2459	2453
10°	2455	2455	2455
15°	2444	2453	2460
20°	2427	2447	2461
25°	2407	2435	2460
30°	2378	2423	2459
35°	2350	2413	2467
40°	2317	2400	2476
45°	2270	2388	2510
50°	2214	2378	2557
55°	2147	2381	2626
60°	2053	2405	2725
65°	1899	2429	2861
70°	1711	2506	3039
75°	1446	2583	2718
80°	1124	2210	2283
85°	807	1505	1321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.8	3.1
10°-20°	496.2	8.9
20°-30°	754.6	13.6
30°-40°	916.8	16.5
40°-50°	967.6	17.4
50°-60°	909.2	16.4
60°-70°	748.5	13.5
70°-80°	471.6	8.5
80°-90°	111.4	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°	1423.6	25.7
0°-40°	2340.4	42.2
0°-60°	4217.3	76.0
0°-90°	5548.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5548.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1823	1823	1823	1823	1823	
5°	1823	1814	1821	1818	1816	173
15°	1754	1747	1761	1766	1766	495
25°	1621	1619	1640	1650	1657	747
35°	1431	1438	1469	1488	1502	895
45°	1193	1212	1255	1291	1319	920
55°	915	948	1015	1086	1120	817
65°	597	654	763	860	898	592
75°	278	364	497	542	523	297
85°	52	88	98	90	86	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1823.1	1823.1	1823.1	1823.1	1823.1
2.5°	1830.2	1818.3	1825.5	1823.1	1816.0
5°	1823.1	1813.6	1820.7	1818.3	1816.0
7.5°	1813.6	1804.1	1811.2	1808.8	1808.8
10°	1797.0	1789.8	1797.0	1797.0	1797.0
12.5°	1777.9	1770.8	1780.3	1782.7	1785.1
15°	1754.2	1747.0	1761.3	1766.1	1766.1
17.5°	1725.6	1720.9	1735.2	1739.9	1744.7
20°	1694.7	1692.4	1709.0	1713.8	1718.5
22.5°	1659.1	1659.1	1675.7	1680.5	1690.0
25°	1621.1	1618.7	1640.1	1649.6	1656.7
27.5°	1578.3	1578.3	1602.0	1613.9	1621.1
30°	1530.7	1535.5	1559.3	1573.5	1583.0
32.5°	1483.2	1488.0	1516.5	1533.1	1545.0
35°	1430.9	1438.0	1468.9	1488.0	1502.2
37.5°	1373.9	1385.7	1419.0	1440.4	1457.1
40°	1319.2	1328.7	1366.7	1390.5	1409.5
42.5°	1257.4	1274.0	1312.1	1340.6	1362.0
45°	1193.2	1212.2	1255.0	1290.7	1319.2
47.5°	1126.7	1150.4	1195.6	1243.1	1271.7
50°	1057.7	1083.9	1136.2	1193.2	1221.7
52.5°	988.8	1017.3	1074.4	1140.9	1171.8
55°	915.1	948.4	1014.9	1086.3	1119.5
57.5°	839.1	877.1	953.1	1034.0	1067.2
60°	763.0	803.4	893.7	974.5	1012.6
62.5°	684.6	729.7	827.2	919.9	955.5
65°	596.6	653.7	763.0	860.4	898.5
67.5°	515.8	575.2	701.2	798.6	839.1
70°	435.0	503.9	637.0	734.5	772.5
72.5°	354.2	435.0	565.7	665.5	686.9
75°	278.1	363.7	496.8	541.9	522.9
77.5°	204.4	299.5	418.3	394.6	389.8
80°	145.0	237.7	285.2	287.6	294.7
82.5°	92.7	175.9	185.4	187.8	190.2
85°	52.3	87.9	97.5	90.3	85.6
87.5°	23.8	28.5	23.8	16.6	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)