

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: P345068

Luminaire Tested: **24CZ-65-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345068
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-65-L840-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5696.5 lumens
Efficiency: N/A
Efficacy: 98.9 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

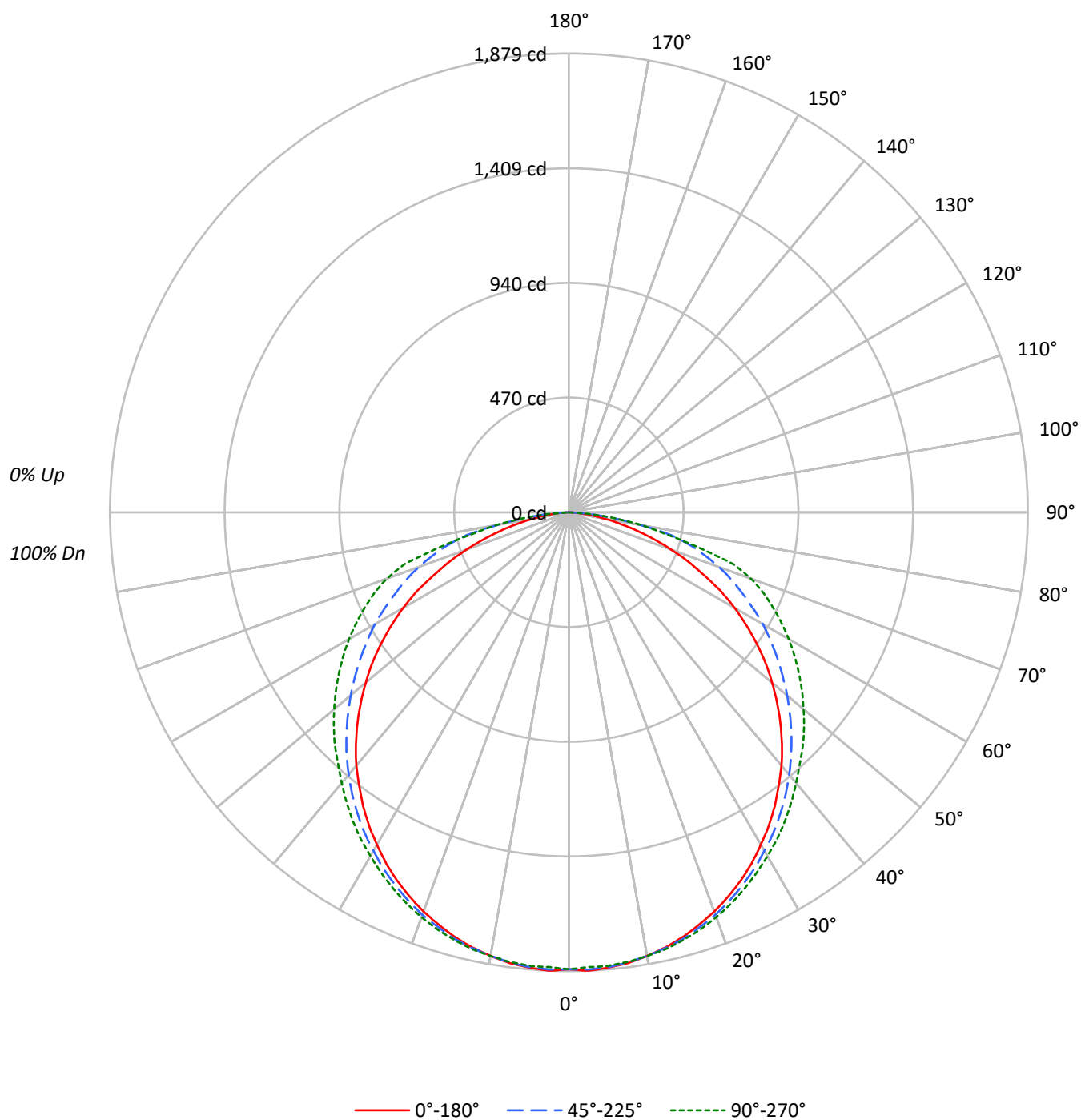
Input Watts (W): 57.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	2518	2518	2518
5°	2528	2525	2518
10°	2520	2520	2520
15°	2509	2519	2526
20°	2491	2512	2526
25°	2471	2500	2525
30°	2442	2487	2525
35°	2413	2477	2533
40°	2379	2464	2542
45°	2331	2452	2577
50°	2273	2442	2626
55°	2204	2444	2696
60°	2108	2469	2797
65°	1950	2494	2937
70°	1757	2573	3120
75°	1484	2651	2791
80°	1154	2269	2345
85°	829	1544	1355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.4	3.1
10°-20°	509.4	8.9
20°-30°	774.7	13.6
30°-40°	941.2	16.5
40°-50°	993.4	17.4
50°-60°	933.4	16.4
60°-70°	768.5	13.5
70°-80°	484.2	8.5
80°-90°	114.3	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°	1461.5	25.7
0°-40°	2402.7	42.2
0°-60°	4329.6	76.0
0°-90°	5696.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5696.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1872	1872	1872	1872	1872	
5°	1872	1862	1869	1867	1864	178
15°	1801	1794	1808	1813	1813	508
25°	1664	1662	1684	1694	1701	766
35°	1469	1476	1508	1528	1542	918
45°	1225	1244	1288	1325	1354	944
55°	940	974	1042	1115	1149	839
65°	612	671	783	883	922	608
75°	286	373	510	556	537	305
85°	54	90	100	93	88	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1871.6	1871.6	1871.6	1871.6	1871.6
2.5°	1879.0	1866.8	1874.1	1871.6	1864.3
5°	1871.6	1861.9	1869.2	1866.8	1864.3
7.5°	1861.9	1852.1	1859.4	1857.0	1857.0
10°	1844.8	1837.5	1844.8	1844.8	1844.8
12.5°	1825.3	1817.9	1827.7	1830.1	1832.6
15°	1800.9	1793.5	1808.2	1813.1	1813.1
17.5°	1771.6	1766.7	1781.3	1786.2	1791.1
20°	1739.9	1737.4	1754.5	1759.4	1764.3
22.5°	1703.3	1703.3	1720.3	1725.2	1735.0
25°	1664.2	1661.8	1683.7	1693.5	1700.8
27.5°	1620.3	1620.3	1644.7	1656.9	1664.2
30°	1571.5	1576.4	1600.8	1615.4	1625.2
32.5°	1522.7	1527.6	1556.8	1573.9	1586.1
35°	1469.0	1476.3	1508.0	1527.6	1542.2
37.5°	1410.4	1422.6	1456.8	1478.8	1495.8
40°	1354.3	1364.1	1403.1	1427.5	1447.0
42.5°	1290.9	1307.9	1347.0	1376.3	1398.2
45°	1225.0	1244.5	1288.4	1325.0	1354.3
47.5°	1156.7	1181.1	1227.4	1276.2	1305.5
50°	1085.9	1112.7	1166.4	1225.0	1254.3
52.5°	1015.1	1044.4	1103.0	1171.3	1203.0
55°	939.5	973.6	1042.0	1115.2	1149.3
57.5°	861.4	900.4	978.5	1061.5	1095.6
60°	783.3	824.8	917.5	1000.5	1039.5
62.5°	702.8	749.1	849.2	944.4	981.0
65°	612.5	671.1	783.3	883.4	922.4
67.5°	529.5	590.5	719.9	819.9	861.4
70°	446.6	517.3	654.0	754.0	793.1
72.5°	363.6	446.6	580.8	683.3	705.2
75°	285.5	373.4	510.0	556.4	536.8
77.5°	209.9	307.5	429.5	405.1	400.2
80°	148.9	244.0	292.8	295.3	302.6
82.5°	95.2	180.6	190.3	192.8	195.2
85°	53.7	90.3	100.0	92.7	87.8
87.5°	24.4	29.3	24.4	17.1	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)