

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: P345105

Luminaire Tested: **24CZ-60SE-L850-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345105
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-60SE-L850-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5582.8 lumens
Efficiency: N/A
Efficacy: 93.0 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

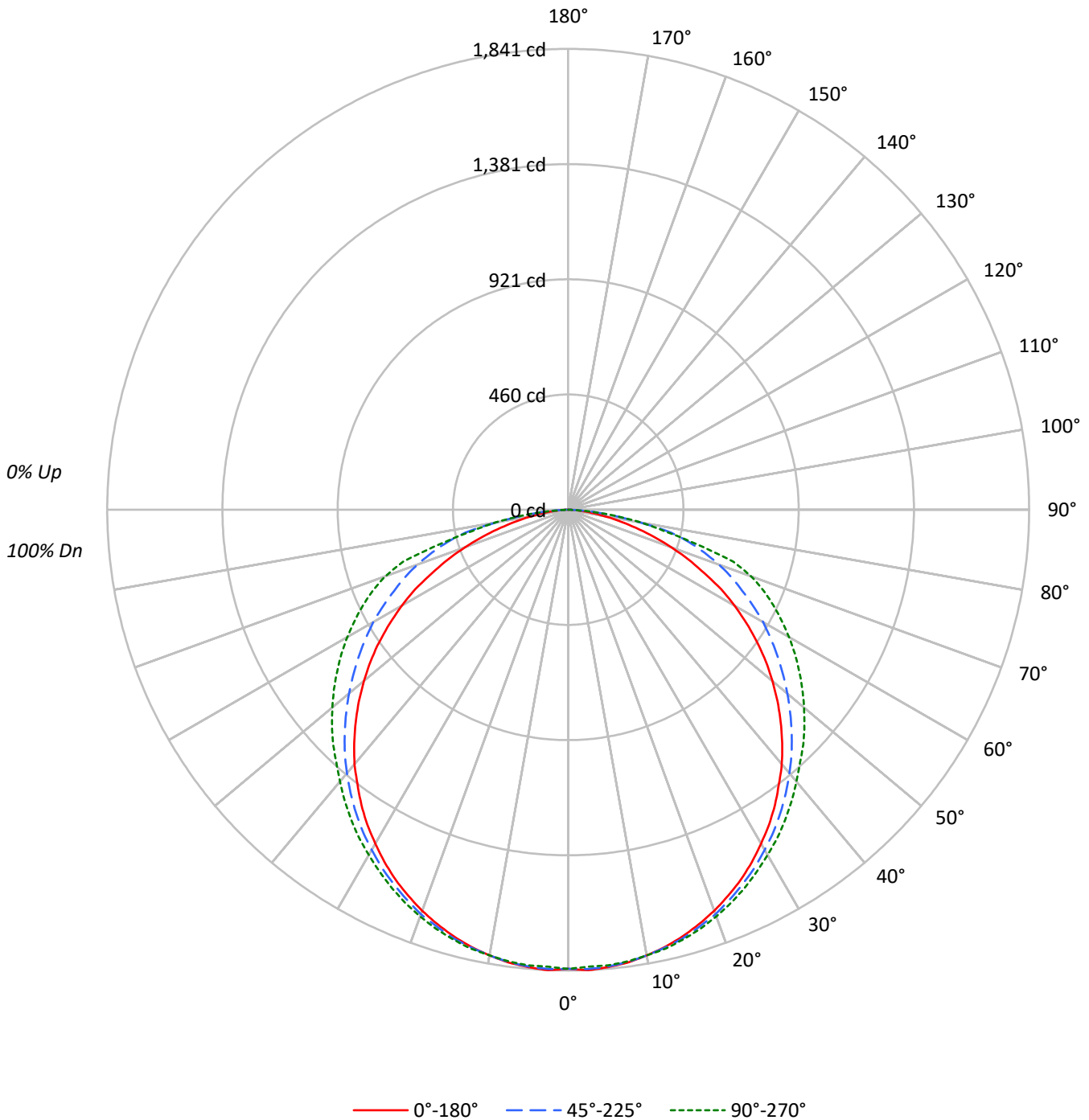
Input Watts (W): 60
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2468	2468	2468
5°	2477	2474	2468
10°	2470	2470	2470
15°	2458	2468	2475
20°	2441	2462	2476
25°	2421	2450	2475
30°	2393	2437	2474
35°	2365	2428	2483
40°	2331	2415	2491
45°	2284	2403	2526
50°	2228	2393	2573
55°	2160	2396	2642
60°	2066	2420	2742
65°	1911	2444	2878
70°	1721	2521	3057
75°	1455	2598	2735
80°	1130	2224	2297
85°	812	1514	1329



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.9	3.1
10°-20°	499.3	8.9
20°-30°	759.2	13.6
30°-40°	922.4	16.5
40°-50°	973.6	17.4
50°-60°	914.8	16.4
60°-70°	753.1	13.5
70°-80°	474.5	8.5
80°-90°	112.0	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°	1432.3	25.7
0°-40°	2354.8	42.2
0°-60°	4243.2	76.0
0°-90°	5582.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5582.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1834	1834	1834	1834	1834	
5°	1834	1825	1832	1830	1827	174
15°	1765	1758	1772	1777	1777	498
25°	1631	1629	1650	1660	1667	751
35°	1440	1447	1478	1497	1511	900
45°	1200	1220	1263	1299	1327	926
55°	921	954	1021	1093	1126	822
65°	600	658	768	866	904	596
75°	280	366	500	545	526	299
85°	53	88	98	91	86	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1834.3	1834.3	1834.3	1834.3	1834.3
2.5°	1841.4	1829.5	1836.7	1834.3	1827.1
5°	1834.3	1824.7	1831.9	1829.5	1827.1
7.5°	1824.7	1815.1	1822.3	1819.9	1819.9
10°	1808.0	1800.8	1808.0	1808.0	1808.0
12.5°	1788.8	1781.6	1791.2	1793.6	1796.0
15°	1764.9	1757.7	1772.1	1776.9	1776.9
17.5°	1736.2	1731.4	1745.8	1750.6	1755.3
20°	1705.1	1702.7	1719.5	1724.3	1729.0
22.5°	1669.2	1669.2	1686.0	1690.8	1700.3
25°	1631.0	1628.6	1650.1	1659.7	1666.9
27.5°	1587.9	1587.9	1611.9	1623.8	1631.0
30°	1540.1	1544.9	1568.8	1583.2	1592.7
32.5°	1492.3	1497.1	1525.8	1542.5	1554.5
35°	1439.7	1446.8	1477.9	1497.1	1511.4
37.5°	1382.3	1394.2	1427.7	1449.2	1466.0
40°	1327.3	1336.8	1375.1	1399.0	1418.1
42.5°	1265.1	1281.8	1320.1	1348.8	1370.3
45°	1200.5	1219.7	1262.7	1298.6	1327.3
47.5°	1133.6	1157.5	1202.9	1250.7	1279.4
50°	1064.2	1090.5	1143.1	1200.5	1229.2
52.5°	994.9	1023.6	1080.9	1147.9	1179.0
55°	920.7	954.2	1021.2	1092.9	1126.4
57.5°	844.2	882.5	959.0	1040.3	1073.8
60°	767.7	808.3	899.2	980.5	1018.8
62.5°	688.7	734.2	832.2	925.5	961.4
65°	600.3	657.7	767.7	865.7	904.0
67.5°	518.9	578.7	705.5	803.5	844.2
70°	437.6	507.0	640.9	739.0	777.2
72.5°	356.3	437.6	569.2	669.6	691.1
75°	279.8	365.9	499.8	545.3	526.1
77.5°	205.7	301.3	420.9	397.0	392.2
80°	145.9	239.1	287.0	289.4	296.5
82.5°	93.3	177.0	186.5	188.9	191.3
85°	52.6	88.5	98.1	90.9	86.1
87.5°	23.9	28.7	23.9	16.7	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)