

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: P345052

Luminaire Tested: **24CZ-45-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345052
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-45-L840-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3869.0 lumens
Efficiency: N/A
Efficacy: 108.4 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

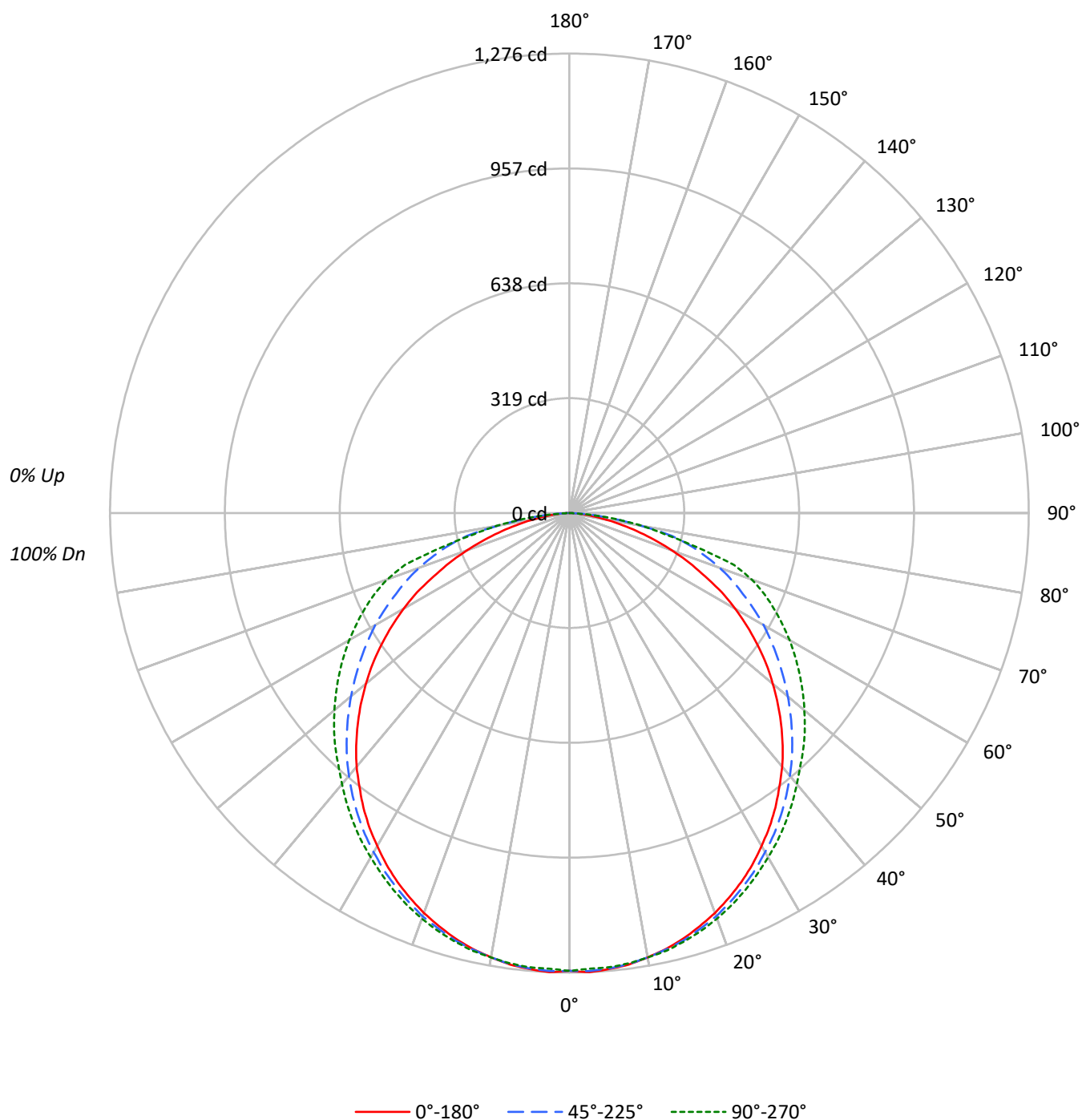
Input Watts (W): 35.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	1710	1710	1710
5°	1717	1715	1710
10°	1712	1712	1712
15°	1704	1711	1715
20°	1692	1706	1716
25°	1678	1698	1715
30°	1658	1689	1715
35°	1639	1682	1720
40°	1616	1674	1726
45°	1583	1665	1750
50°	1544	1658	1783
55°	1497	1660	1831
60°	1432	1677	1900
65°	1324	1694	1995
70°	1193	1747	2119
75°	1008	1801	1895
80°	783	1541	1592
85°	563	1050	922



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.5	3.1
10°-20°	346.0	8.9
20°-30°	526.2	13.6
30°-40°	639.3	16.5
40°-50°	674.7	17.4
50°-60°	634.0	16.4
60°-70°	521.9	13.5
70°-80°	328.8	8.5
80°-90°	77.6	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°	992.6	25.7
0°-40°	1631.9	42.2
0°-60°	2940.6	76.0
0°-90°	3869.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3869.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1271	1271	1271	1271	1271	
5°	1271	1265	1270	1268	1266	121
15°	1223	1218	1228	1231	1231	345
25°	1130	1129	1144	1150	1155	521
35°	998	1003	1024	1038	1047	624
45°	832	845	875	900	920	641
55°	638	661	708	757	781	570
65°	416	456	532	600	626	413
75°	194	254	346	378	365	207
85°	36	61	68	63	60	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1271.2	1271.2	1271.2	1271.2	1271.2
2.5°	1276.2	1267.9	1272.8	1271.2	1266.2
5°	1271.2	1264.6	1269.5	1267.9	1266.2
7.5°	1264.6	1257.9	1262.9	1261.2	1261.2
10°	1252.9	1248.0	1252.9	1252.9	1252.9
12.5°	1239.7	1234.7	1241.3	1243.0	1244.7
15°	1223.1	1218.1	1228.1	1231.4	1231.4
17.5°	1203.2	1199.9	1209.9	1213.2	1216.5
20°	1181.7	1180.0	1191.6	1194.9	1198.3
22.5°	1156.8	1156.8	1168.4	1171.7	1178.4
25°	1130.3	1128.6	1143.6	1150.2	1155.2
27.5°	1100.5	1100.5	1117.0	1125.3	1130.3
30°	1067.3	1070.6	1087.2	1097.2	1103.8
32.5°	1034.2	1037.5	1057.4	1069.0	1077.3
35°	997.7	1002.7	1024.2	1037.5	1047.4
37.5°	957.9	966.2	989.4	1004.3	1016.0
40°	919.8	926.5	953.0	969.5	982.8
42.5°	876.7	888.3	914.9	934.7	949.7
45°	832.0	845.2	875.1	899.9	919.8
47.5°	785.6	802.2	833.6	866.8	886.7
50°	737.5	755.7	792.2	832.0	851.9
52.5°	689.5	709.3	749.1	795.5	817.1
55°	638.1	661.3	707.7	757.4	780.6
57.5°	585.0	611.6	664.6	720.9	744.1
60°	532.0	560.2	623.2	679.5	706.0
62.5°	477.3	508.8	576.8	641.4	666.3
65°	416.0	455.8	532.0	600.0	626.5
67.5°	359.6	401.1	488.9	556.9	585.0
70°	303.3	351.4	444.2	512.1	538.6
72.5°	246.9	303.3	394.4	464.1	479.0
75°	193.9	253.6	346.4	377.9	364.6
77.5°	142.5	208.8	291.7	275.1	271.8
80°	101.1	165.7	198.9	200.5	205.5
82.5°	64.6	122.6	129.3	130.9	132.6
85°	36.5	61.3	68.0	63.0	59.7
87.5°	16.6	19.9	16.6	11.6	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)