

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: P345088

Luminaire Tested: **24CZ-40SE-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345088
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-40SE-L840-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3479.3 lumens
Efficiency: N/A
Efficacy: 106.7 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

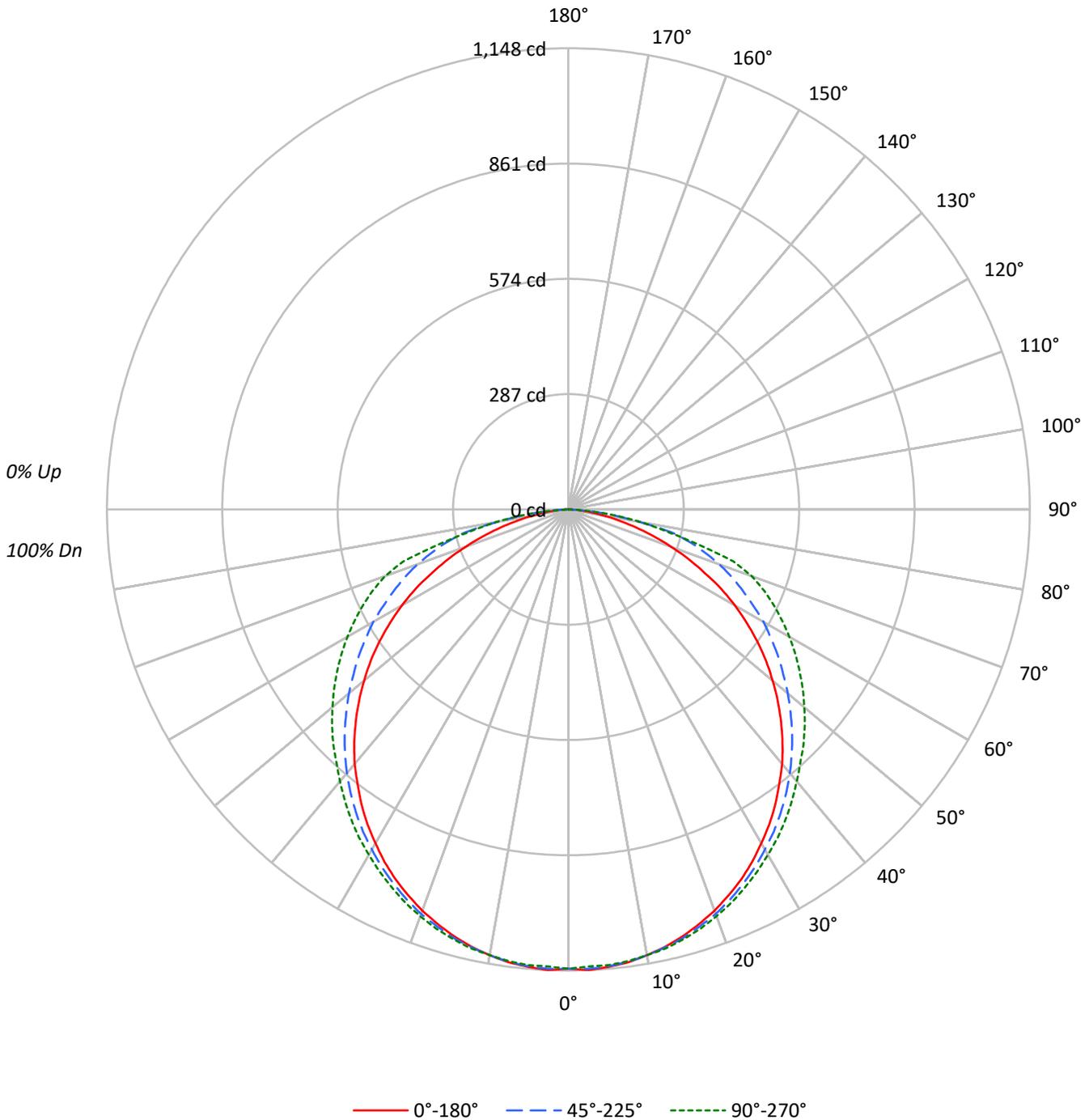
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1538	1538	1538
5°	1544	1542	1538
10°	1539	1539	1539
15°	1532	1538	1543
20°	1522	1534	1543
25°	1509	1527	1542
30°	1491	1519	1542
35°	1474	1513	1547
40°	1453	1505	1552
45°	1424	1498	1574
50°	1388	1491	1604
55°	1346	1493	1647
60°	1287	1508	1709
65°	1191	1523	1794
70°	1073	1571	1906
75°	907	1619	1705
80°	704	1386	1432
85°	506	943	829



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.4	3.1
10°-20°	311.1	8.9
20°-30°	473.2	13.6
30°-40°	574.9	16.5
40°-50°	606.8	17.4
50°-60°	570.1	16.4
60°-70°	469.4	13.5
70°-80°	295.7	8.5
80°-90°	69.8	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°	892.7	25.7
0°-40°	1467.6	42.2
0°-60°	2644.5	76.0
0°-90°	3479.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3479.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1143	1143	1143	1143	1143	
5°	1143	1137	1142	1140	1139	109
15°	1100	1096	1104	1107	1107	310
25°	1016	1015	1028	1034	1039	468
35°	897	902	921	933	942	561
45°	748	760	787	809	827	577
55°	574	595	636	681	702	512
65°	374	410	478	540	563	371
75°	174	228	312	340	328	186
85°	33	55	61	57	54	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1143.2	1143.2	1143.2	1143.2	1143.2
2.5°	1147.6	1140.2	1144.7	1143.2	1138.7
5°	1143.2	1137.2	1141.7	1140.2	1138.7
7.5°	1137.2	1131.2	1135.7	1134.2	1134.2
10°	1126.8	1122.3	1126.8	1126.8	1126.8
12.5°	1114.9	1110.4	1116.3	1117.8	1119.3
15°	1099.9	1095.5	1104.4	1107.4	1107.4
17.5°	1082.1	1079.1	1088.0	1091.0	1094.0
20°	1062.7	1061.2	1071.6	1074.6	1077.6
22.5°	1040.3	1040.3	1050.8	1053.7	1059.7
25°	1016.5	1015.0	1028.4	1034.4	1038.8
27.5°	989.7	989.7	1004.6	1012.0	1016.5
30°	959.8	962.8	977.7	986.7	992.6
32.5°	930.0	933.0	950.9	961.3	968.8
35°	897.2	901.7	921.1	933.0	942.0
37.5°	861.5	868.9	889.8	903.2	913.6
40°	827.2	833.2	857.0	871.9	883.8
42.5°	788.4	798.9	822.7	840.6	854.0
45°	748.2	760.1	787.0	809.3	827.2
47.5°	706.5	721.4	749.7	779.5	797.4
50°	663.2	679.6	712.4	748.2	766.1
52.5°	620.0	637.9	673.7	715.4	734.8
55°	573.8	594.7	636.4	681.1	702.0
57.5°	526.1	550.0	597.7	648.3	669.2
60°	478.4	503.8	560.4	611.1	634.9
62.5°	429.2	457.6	518.7	576.8	599.2
65°	374.1	409.9	478.4	539.5	563.4
67.5°	323.4	360.7	439.7	500.8	526.1
70°	272.8	316.0	399.4	460.5	484.4
72.5°	222.1	272.8	354.7	417.3	430.7
75°	174.4	228.0	311.5	339.8	327.9
77.5°	128.2	187.8	262.3	247.4	244.4
80°	90.9	149.0	178.9	180.3	184.8
82.5°	58.1	110.3	116.3	117.7	119.2
85°	32.8	55.1	61.1	56.6	53.7
87.5°	14.9	17.9	14.9	10.4	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)