

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: P345089

Luminaire Tested: **24CZ-40SE-L850-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345089
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-L850-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3763.7 lumens
Efficiency: N/A
Efficacy: 115.5 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

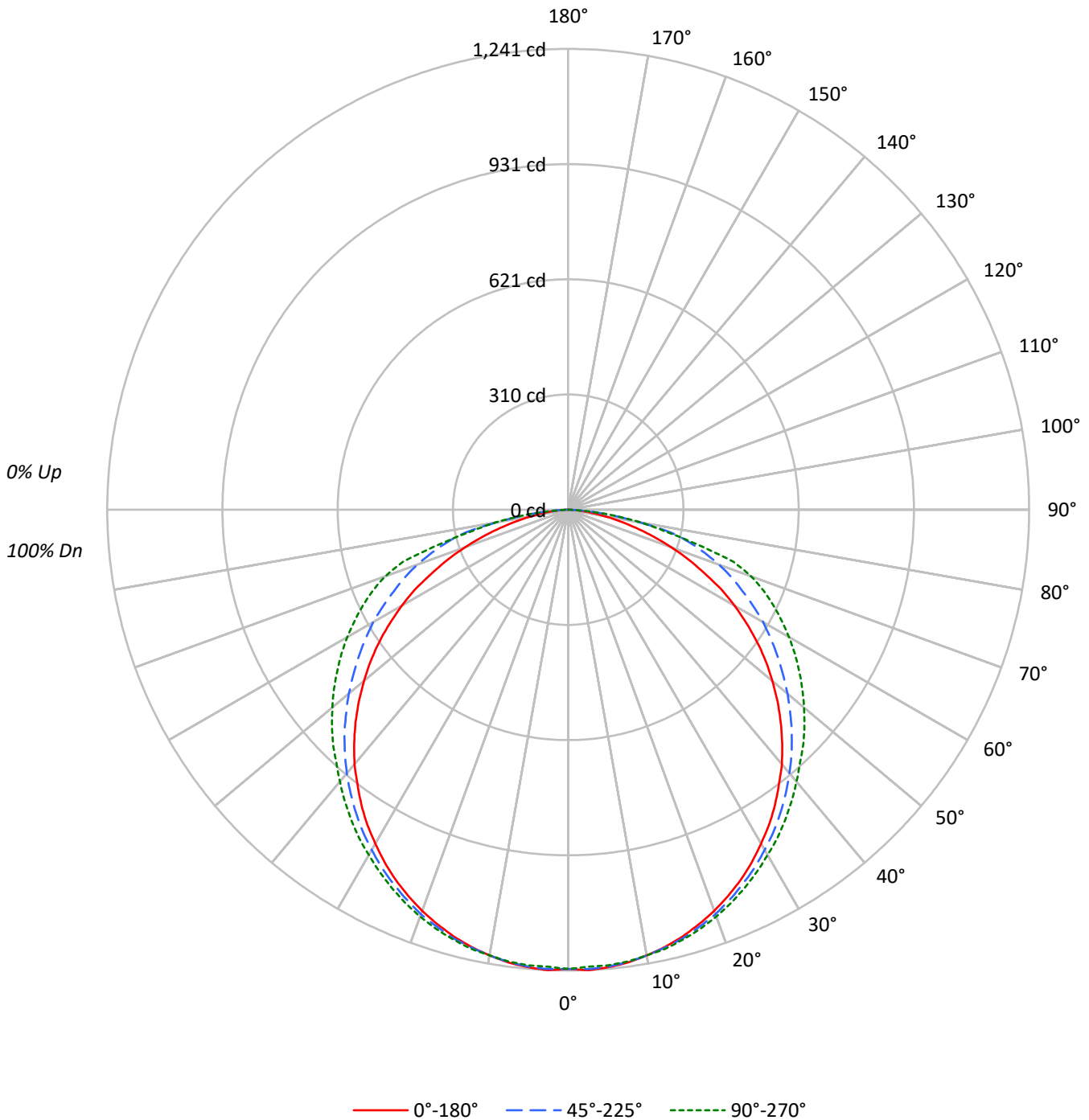
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1664	1664	1664
5°	1670	1668	1664
10°	1665	1665	1665
15°	1657	1664	1669
20°	1646	1660	1669
25°	1632	1652	1668
30°	1613	1643	1668
35°	1594	1637	1674
40°	1572	1628	1679
45°	1540	1620	1703
50°	1502	1613	1735
55°	1456	1615	1781
60°	1393	1631	1848
65°	1288	1648	1940
70°	1161	1700	2061
75°	980	1752	1844
80°	762	1499	1549
85°	548	1020	895



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.2	3.1
10°-20°	336.6	8.9
20°-30°	511.8	13.6
30°-40°	621.9	16.5
40°-50°	656.4	17.4
50°-60°	616.7	16.4
60°-70°	507.7	13.5
70°-80°	319.9	8.5
80°-90°	75.5	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°	965.6	25.7
0°-40°	1587.5	42.2
0°-60°	2860.6	76.0
0°-90°	3763.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3763.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1237	1237	1237	1237	1237	
5°	1237	1230	1235	1233	1232	117
15°	1190	1185	1195	1198	1198	336
25°	1100	1098	1112	1119	1124	506
35°	971	975	996	1009	1019	607
45°	809	822	851	876	895	624
55°	621	643	688	737	759	554
65°	405	443	518	584	609	402
75°	189	247	337	368	355	201
85°	36	60	66	61	58	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1236.6	1236.6	1236.6	1236.6	1236.6
2.5°	1241.4	1233.4	1238.2	1236.6	1231.8
5°	1236.6	1230.1	1235.0	1233.4	1231.8
7.5°	1230.1	1223.7	1228.5	1226.9	1226.9
10°	1218.9	1214.0	1218.9	1218.9	1218.9
12.5°	1206.0	1201.1	1207.6	1209.2	1210.8
15°	1189.8	1185.0	1194.7	1197.9	1197.9
17.5°	1170.5	1167.3	1176.9	1180.2	1183.4
20°	1149.5	1147.9	1159.2	1162.4	1165.7
22.5°	1125.4	1125.4	1136.6	1139.9	1146.3
25°	1099.6	1097.9	1112.5	1118.9	1123.7
27.5°	1070.5	1070.5	1086.7	1094.7	1099.6
30°	1038.3	1041.5	1057.6	1067.3	1073.8
32.5°	1006.0	1009.3	1028.6	1039.9	1048.0
35°	970.6	975.4	996.4	1009.3	1018.9
37.5°	931.9	939.9	962.5	977.0	988.3
40°	894.8	901.2	927.0	943.2	956.1
42.5°	852.9	864.2	890.0	909.3	923.8
45°	809.4	822.2	851.3	875.5	894.8
47.5°	764.2	780.3	811.0	843.2	862.6
50°	717.5	735.2	770.7	809.4	828.7
52.5°	670.7	690.0	728.7	773.9	794.8
55°	620.7	643.3	688.4	736.8	759.4
57.5°	569.1	594.9	646.5	701.3	723.9
60°	517.5	544.9	606.2	661.0	686.8
62.5°	464.3	495.0	561.1	623.9	648.1
65°	404.7	443.4	517.5	583.6	609.4
67.5°	349.9	390.2	475.6	541.7	569.1
70°	295.0	341.8	432.1	498.2	524.0
72.5°	240.2	295.0	383.7	451.4	465.9
75°	188.6	246.7	337.0	367.6	354.7
77.5°	138.7	203.1	283.8	267.6	264.4
80°	98.3	161.2	193.5	195.1	199.9
82.5°	62.9	119.3	125.8	127.4	129.0
85°	35.5	59.7	66.1	61.3	58.0
87.5°	16.1	19.3	16.1	11.3	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)