

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: P345086

Luminaire Tested: **24CZ-40SE-L830-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345086
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-L830-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3380.0 lumens
Efficiency: N/A
Efficacy: 103.7 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

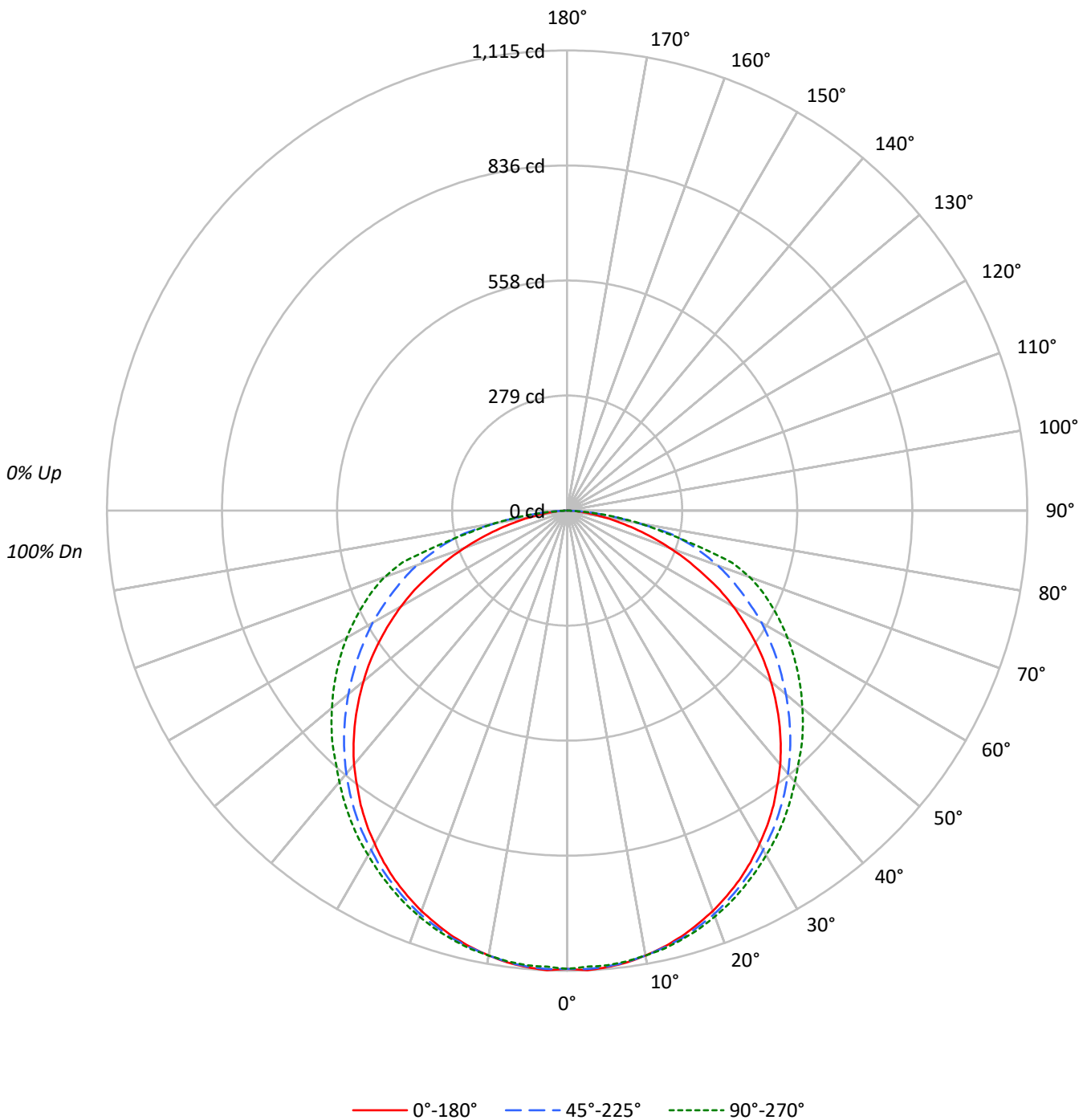
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1494	1494	1494
5°	1500	1498	1494
10°	1495	1495	1495
15°	1489	1494	1499
20°	1478	1491	1499
25°	1466	1483	1498
30°	1449	1476	1498
35°	1432	1470	1503
40°	1411	1462	1508
45°	1383	1455	1529
50°	1349	1449	1558
55°	1308	1450	1600
60°	1251	1465	1660
65°	1157	1480	1742
70°	1042	1526	1851
75°	881	1573	1656
80°	684	1346	1391
85°	492	917	804



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.3	3.1
10°-20°	302.3	8.9
20°-30°	459.7	13.6
30°-40°	558.5	16.5
40°-50°	589.4	17.4
50°-60°	553.9	16.4
60°-70°	456.0	13.5
70°-80°	287.3	8.5
80°-90°	67.8	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°	867.2	25.7
0°-40°	1425.7	42.2
0°-60°	2569.0	76.0
0°-90°	3380.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3380.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1110	1110	1110	1110	1110	
5°	1110	1105	1109	1108	1106	106
15°	1069	1064	1073	1076	1076	301
25°	988	986	999	1005	1009	455
35°	872	876	895	906	915	545
45°	727	738	764	786	804	560
55°	557	578	618	662	682	498
65°	363	398	465	524	547	361
75°	169	222	303	330	318	181
85°	32	54	59	55	52	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1110.5	1110.5	1110.5	1110.5	1110.5
2.5°	1114.9	1107.6	1112.0	1110.5	1106.2
5°	1110.5	1104.7	1109.1	1107.6	1106.2
7.5°	1104.7	1099.0	1103.3	1101.9	1101.9
10°	1094.6	1090.3	1094.6	1094.6	1094.6
12.5°	1083.0	1078.7	1084.5	1085.9	1087.4
15°	1068.6	1064.2	1072.9	1075.8	1075.8
17.5°	1051.2	1048.3	1057.0	1059.9	1062.8
20°	1032.4	1030.9	1041.0	1043.9	1046.8
22.5°	1010.6	1010.6	1020.8	1023.7	1029.5
25°	987.5	986.0	999.1	1004.8	1009.2
27.5°	961.4	961.4	975.9	983.1	987.5
30°	932.4	935.3	949.8	958.5	964.3
32.5°	903.5	906.4	923.8	933.9	941.1
35°	871.6	876.0	894.8	906.4	915.1
37.5°	836.9	844.1	864.4	877.4	887.6
40°	803.6	809.4	832.5	847.0	858.6
42.5°	765.9	776.1	799.2	816.6	829.6
45°	726.8	738.4	764.5	786.2	803.6
47.5°	686.3	700.8	728.3	757.3	774.6
50°	644.3	660.2	692.1	726.8	744.2
52.5°	602.3	619.7	654.5	695.0	713.8
55°	557.4	577.7	618.3	661.7	682.0
57.5°	511.1	534.3	580.6	629.8	650.1
60°	464.8	489.4	544.4	593.6	616.8
62.5°	417.0	444.5	503.9	560.3	582.1
65°	363.4	398.2	464.8	524.1	547.3
67.5°	314.2	350.4	427.1	486.5	511.1
70°	265.0	307.0	388.0	447.4	470.6
72.5°	215.7	265.0	344.6	405.4	418.4
75°	169.4	221.5	302.6	330.1	318.5
77.5°	124.5	182.4	254.8	240.4	237.5
80°	88.3	144.8	173.7	175.2	179.5
82.5°	56.5	107.1	112.9	114.4	115.8
85°	31.9	53.6	59.4	55.0	52.1
87.5°	14.5	17.4	14.5	10.1	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)