

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: P345063

Luminaire Tested: **24CZ-60-L835-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345063
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-60-L835-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5177.0 lumens
Efficiency: N/A
Efficacy: 99.2 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

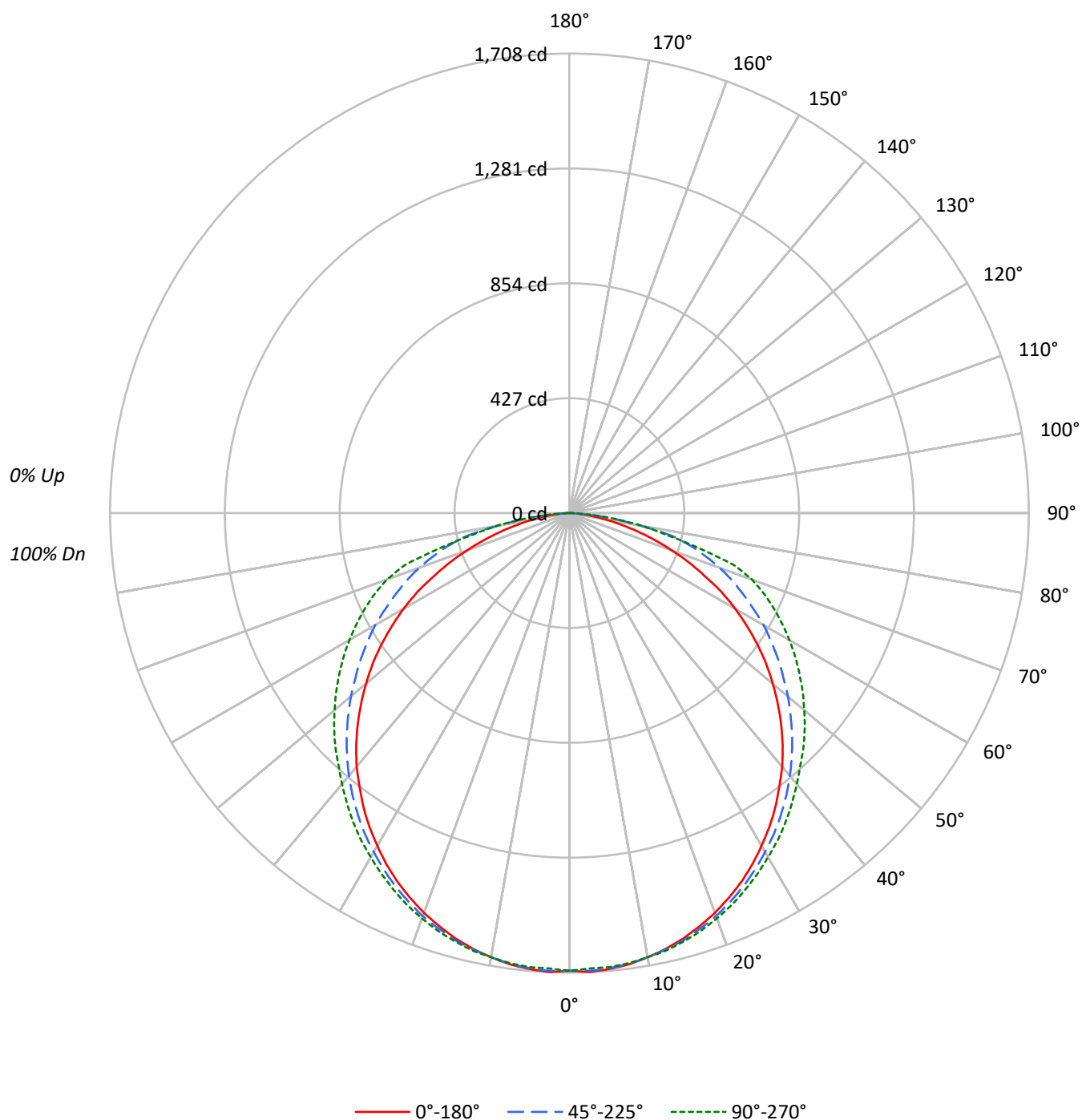
Input Watts (W): 52.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		83
2	98	89	82	76	95	87	81	75	84	78	74		81	76	72		68
3	89	78	70	63	86	76	69	62	73	67	61		71	65	60		57
4	81	69	60	53	79	68	59	52	65	58	52		63	56	51		48
5	75	61	52	45	72	60	52	45	58	50	44		56	49	44		41
6	69	55	46	39	67	54	45	39	52	45	39		51	44	38		36
7	64	50	41	35	62	49	41	34	48	40	34		46	39	34		32
8	59	45	37	31	58	45	36	31	43	36	31		42	35	30		28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2289	2289	2289
5°	2297	2294	2288
10°	2291	2291	2291
15°	2280	2289	2295
20°	2264	2283	2296
25°	2245	2272	2295
30°	2219	2260	2295
35°	2193	2251	2302
40°	2162	2240	2310
45°	2118	2228	2342
50°	2066	2219	2386
55°	2003	2221	2450
60°	1916	2244	2542
65°	1772	2266	2669
70°	1596	2338	2835
75°	1349	2410	2536
80°	1048	2062	2131
85°	753	1403	1232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.2	3.1
10°-20°	463.0	8.9
20°-30°	704.1	13.6
30°-40°	855.4	16.5
40°-50°	902.8	17.4
50°-60°	848.3	16.4
60°-70°	698.4	13.5
70°-80°	440.0	8.5
80°-90°	103.9	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°	1328.2	25.7
0°-40°	2183.6	42.2
0°-60°	3934.8	76.0
0°-90°	5177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5177.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1701	1701	1701	1701	1701	
5°	1701	1692	1699	1696	1694	162
15°	1637	1630	1643	1648	1648	462
25°	1512	1510	1530	1539	1546	697
35°	1335	1342	1370	1388	1402	835
45°	1113	1131	1171	1204	1231	858
55°	854	885	947	1014	1044	762
65°	557	610	712	803	838	553
75°	260	339	464	506	488	277
85°	49	82	91	84	80	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1701.0	1701.0	1701.0	1701.0	1701.0
2.5°	1707.6	1696.5	1703.2	1701.0	1694.3
5°	1701.0	1692.1	1698.7	1696.5	1694.3
7.5°	1692.1	1683.2	1689.9	1687.6	1687.6
10°	1676.6	1669.9	1676.6	1676.6	1676.6
12.5°	1658.8	1652.2	1661.0	1663.2	1665.5
15°	1636.6	1630.0	1643.3	1647.7	1647.7
17.5°	1610.0	1605.6	1618.9	1623.3	1627.8
20°	1581.2	1579.0	1594.5	1598.9	1603.4
22.5°	1547.9	1547.9	1563.5	1567.9	1576.8
25°	1512.4	1510.2	1530.2	1539.1	1545.7
27.5°	1472.5	1472.5	1494.7	1505.8	1512.4
30°	1428.2	1432.6	1454.8	1468.1	1477.0
32.5°	1383.8	1388.3	1414.9	1430.4	1441.5
35°	1335.0	1341.7	1370.5	1388.3	1401.6
37.5°	1281.8	1292.9	1323.9	1343.9	1359.4
40°	1230.8	1239.7	1275.2	1297.3	1315.1
42.5°	1173.1	1188.7	1224.2	1250.8	1270.7
45°	1113.3	1131.0	1170.9	1204.2	1230.8
47.5°	1051.2	1073.4	1115.5	1159.8	1186.5
50°	986.9	1011.3	1060.0	1113.3	1139.9
52.5°	922.5	949.2	1002.4	1064.5	1093.3
55°	853.8	884.8	946.9	1013.5	1044.5
57.5°	782.8	818.3	889.3	964.7	995.7
60°	711.9	749.6	833.8	909.2	944.7
62.5°	638.7	680.8	771.7	858.2	891.5
65°	556.6	609.9	711.9	802.8	838.3
67.5°	481.2	536.7	654.2	745.1	782.8
70°	405.8	470.1	594.3	685.3	720.7
72.5°	330.4	405.8	527.8	620.9	640.9
75°	259.5	339.3	463.5	505.6	487.9
77.5°	190.7	279.4	390.3	368.1	363.7
80°	135.3	221.8	266.1	268.3	275.0
82.5°	86.5	164.1	173.0	175.2	177.4
85°	48.8	82.1	90.9	84.3	79.8
87.5°	22.2	26.6	22.2	15.5	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)