

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: P345062

Luminaire Tested: **24CZ-60-L830-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345062
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-L830-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5129.5 lumens
Efficiency: N/A
Efficacy: 98.3 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

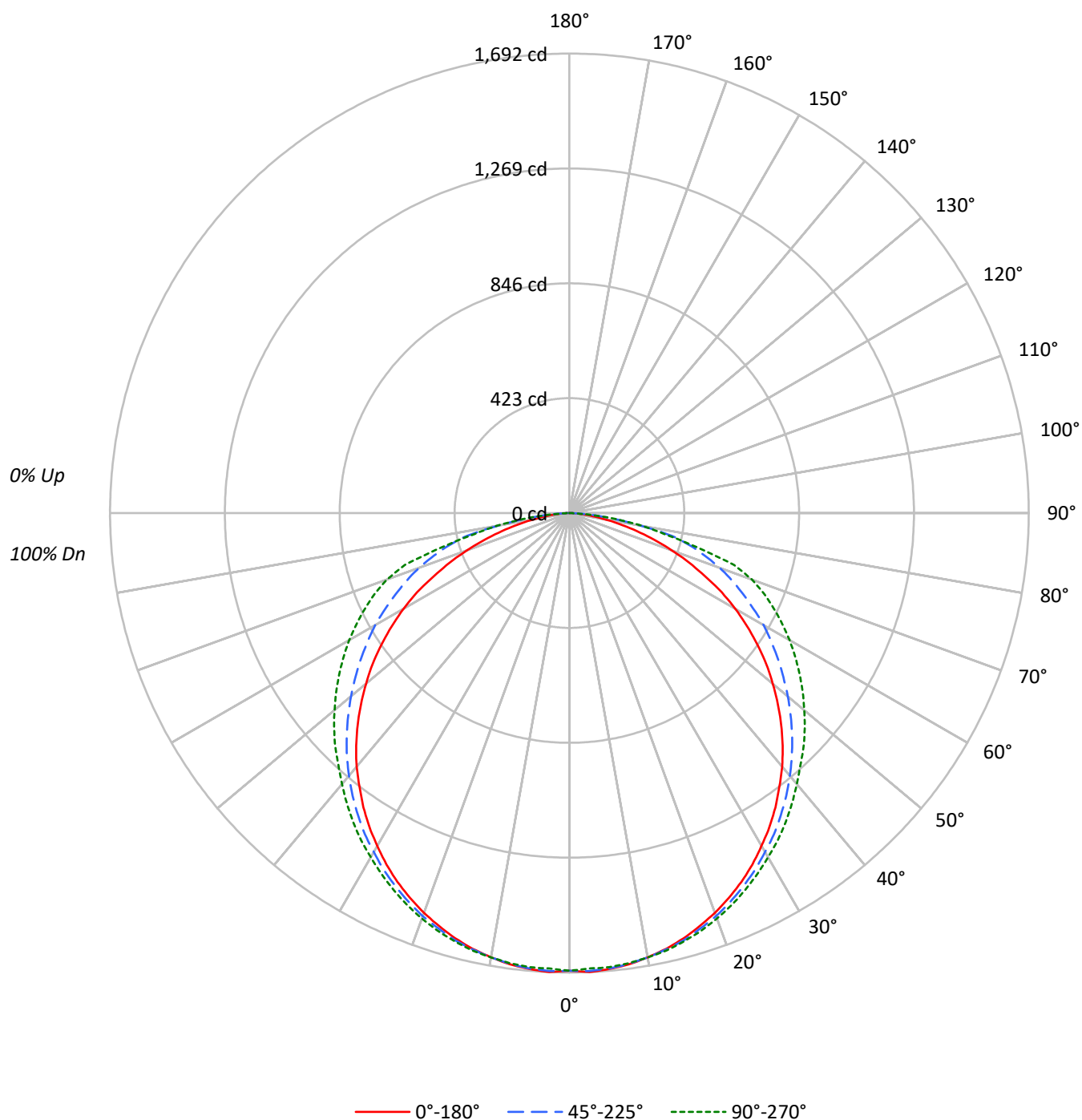
Input Watts (W): 52.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
RW	70	50	30	10	70	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
1	108	103	99	95	105	101	97	93		97	93	90		93	90	87		89	87	85
2	98	89	82	76	95	87	81	75		84	78	74		81	76	72		77	74	70
3	89	78	70	63	86	76	69	62		73	67	61		71	65	60		68	63	59
4	81	69	60	53	79	68	59	52		65	58	52		63	56	51		60	55	50
5	75	61	52	45	72	60	52	45		58	50	44		56	49	44		54	48	43
6	69	55	46	39	67	54	45	39		52	45	39		51	44	38		49	43	38
7	64	50	41	35	62	49	41	34		48	40	34		46	39	34		45	38	34
8	59	45	37	31	58	45	36	31		43	36	31		42	35	30		41	35	30
9	55	42	33	28	54	41	33	28		40	33	27		39	32	27		38	32	27
10	52	38	30	25	51	38	30	25		37	30	25		36	29	25		35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2268	2268	2268
5°	2276	2273	2267
10°	2270	2270	2270
15°	2259	2268	2274
20°	2243	2262	2275
25°	2225	2251	2274
30°	2199	2239	2274
35°	2173	2230	2281
40°	2142	2219	2289
45°	2099	2208	2320
50°	2047	2198	2364
55°	1985	2201	2428
60°	1898	2223	2519
65°	1756	2245	2644
70°	1582	2317	2809
75°	1337	2387	2513
80°	1038	2043	2111
85°	746	1391	1221



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.7	3.1
10°-20°	458.7	8.9
20°-30°	697.6	13.6
30°-40°	847.5	16.5
40°-50°	894.5	17.4
50°-60°	840.5	16.4
60°-70°	692.0	13.5
70°-80°	435.9	8.5
80°-90°	102.9	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°	1316.1	25.7
0°-40°	2163.6	42.2
0°-60°	3898.6	76.0
0°-90°	5129.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5129.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1685	1685	1685	1685	1685	
5°	1685	1676	1683	1681	1679	160
15°	1622	1615	1628	1633	1633	457
25°	1499	1496	1516	1525	1532	690
35°	1323	1329	1358	1376	1389	827
45°	1103	1121	1160	1193	1220	850
55°	846	877	938	1004	1035	755
65°	552	604	705	795	831	548
75°	257	336	459	501	483	274
85°	48	81	90	84	79	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1691.9	1680.9	1687.5	1685.3	1678.7
5°	1685.3	1676.5	1683.1	1680.9	1678.7
7.5°	1676.5	1667.8	1674.3	1672.1	1672.1
10°	1661.2	1654.6	1661.2	1661.2	1661.2
12.5°	1643.6	1637.0	1645.8	1648.0	1650.2
15°	1621.6	1615.0	1628.2	1632.6	1632.6
17.5°	1595.2	1590.8	1604.0	1608.4	1612.8
20°	1566.7	1564.5	1579.9	1584.3	1588.7
22.5°	1533.7	1533.7	1549.1	1553.5	1562.3
25°	1498.6	1496.4	1516.1	1524.9	1531.5
27.5°	1459.0	1459.0	1481.0	1492.0	1498.6
30°	1415.1	1419.5	1441.4	1454.6	1463.4
32.5°	1371.1	1375.5	1401.9	1417.3	1428.2
35°	1322.8	1329.4	1357.9	1375.5	1388.7
37.5°	1270.0	1281.0	1311.8	1331.6	1346.9
40°	1219.5	1228.3	1263.4	1285.4	1303.0
42.5°	1162.4	1177.8	1212.9	1239.3	1259.1
45°	1103.0	1120.6	1160.2	1193.1	1219.5
47.5°	1041.5	1063.5	1105.2	1149.2	1175.6
50°	977.8	1002.0	1050.3	1103.0	1129.4
52.5°	914.1	940.4	993.2	1054.7	1083.3
55°	846.0	876.7	938.2	1004.2	1034.9
57.5°	775.6	810.8	881.1	955.8	986.6
60°	705.3	742.7	826.2	900.9	936.1
62.5°	632.8	674.6	764.7	850.4	883.3
65°	551.5	604.3	705.3	795.4	830.6
67.5°	476.8	531.7	648.2	738.3	775.6
70°	402.1	465.8	588.9	679.0	714.1
72.5°	327.4	402.1	523.0	615.2	635.0
75°	257.1	336.2	459.2	501.0	483.4
77.5°	189.0	276.9	386.7	364.8	360.4
80°	134.0	219.7	263.7	265.9	272.5
82.5°	85.7	162.6	171.4	173.6	175.8
85°	48.3	81.3	90.1	83.5	79.1
87.5°	22.0	26.4	22.0	15.4	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)