

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: P345070

Luminaire Tested: **24CZ-70-L830-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345070
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-70-L830-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5958.0 lumens
Efficiency: N/A
Efficacy: 92.8 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

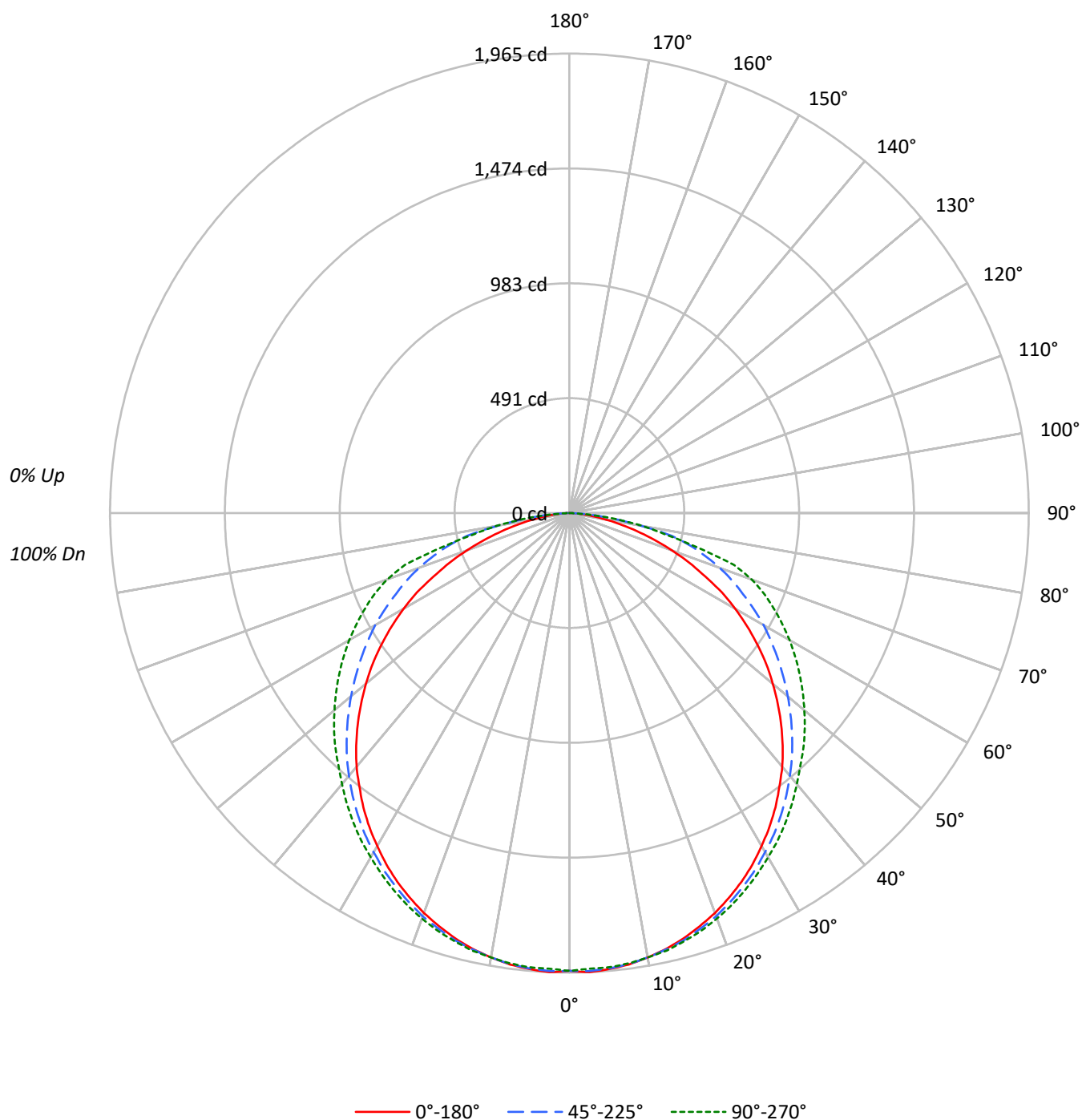
Input Watts (W): 64.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
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°	2634	2634	2634
5°	2644	2640	2634
10°	2636	2636	2636
15°	2624	2634	2641
20°	2606	2627	2642
25°	2584	2614	2641
30°	2554	2601	2641
35°	2524	2591	2649
40°	2488	2578	2658
45°	2438	2564	2695
50°	2377	2554	2746
55°	2305	2556	2820
60°	2205	2582	2926
65°	2039	2608	3071
70°	1838	2691	3263
75°	1552	2773	2919
80°	1206	2373	2452
85°	866	1615	1419



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.5	3.1
10°-20°	532.8	8.9
20°-30°	810.3	13.6
30°-40°	984.4	16.5
40°-50°	1039.0	17.4
50°-60°	976.3	16.4
60°-70°	803.7	13.5
70°-80°	506.4	8.5
80°-90°	119.6	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°	1528.6	25.7
0°-40°	2513.0	42.2
0°-60°	4528.3	76.0
0°-90°	5958.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5958.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1958	1958	1958	1958	1958	
5°	1958	1947	1955	1952	1950	186
15°	1884	1876	1891	1896	1896	531
25°	1741	1738	1761	1771	1779	802
35°	1536	1544	1577	1598	1613	961
45°	1281	1302	1348	1386	1416	988
55°	983	1018	1090	1166	1202	877
65°	641	702	819	924	965	636
75°	299	390	533	582	562	319
85°	56	94	105	97	92	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1957.5	1957.5	1957.5	1957.5	1957.5
2.5°	1965.2	1952.4	1960.1	1957.5	1949.9
5°	1957.5	1947.3	1955.0	1952.4	1949.9
7.5°	1947.3	1937.1	1944.8	1942.2	1942.2
10°	1929.5	1921.8	1929.5	1929.5	1929.5
12.5°	1909.0	1901.4	1911.6	1914.1	1916.7
15°	1883.5	1875.9	1891.2	1896.3	1896.3
17.5°	1852.9	1847.8	1863.1	1868.2	1873.3
20°	1819.7	1817.2	1835.0	1840.1	1845.2
22.5°	1781.4	1781.4	1799.3	1804.4	1814.6
25°	1740.6	1738.0	1761.0	1771.2	1778.9
27.5°	1694.7	1694.7	1720.2	1732.9	1740.6
30°	1643.6	1648.7	1674.2	1689.5	1699.8
32.5°	1592.6	1597.7	1628.3	1646.2	1658.9
35°	1536.4	1544.1	1577.3	1597.7	1613.0
37.5°	1475.2	1487.9	1523.7	1546.6	1564.5
40°	1416.5	1426.7	1467.5	1493.0	1513.4
42.5°	1350.1	1368.0	1408.8	1439.4	1462.4
45°	1281.2	1301.6	1347.6	1385.8	1416.5
47.5°	1209.7	1235.3	1283.8	1334.8	1365.4
50°	1135.7	1163.8	1219.9	1281.2	1311.8
52.5°	1061.7	1092.3	1153.6	1225.1	1258.2
55°	982.6	1018.3	1089.8	1166.4	1202.1
57.5°	900.9	941.8	1023.4	1110.2	1145.9
60°	819.3	862.6	959.6	1046.4	1087.2
62.5°	735.0	783.5	888.2	987.7	1026.0
65°	640.6	701.9	819.3	923.9	964.7
67.5°	553.8	617.6	752.9	857.5	900.9
70°	467.1	541.1	684.0	788.6	829.5
72.5°	380.3	467.1	607.4	714.6	737.6
75°	298.6	390.5	533.4	581.9	561.5
77.5°	219.5	321.6	449.2	423.7	418.6
80°	155.7	255.2	306.3	308.8	316.5
82.5°	99.5	188.9	199.1	201.6	204.2
85°	56.1	94.4	104.6	97.0	91.9
87.5°	25.5	30.6	25.5	17.9	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)