

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: P276252

Luminaire Tested: **24CZ2-70HE-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276252
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-70HE-UNV-L92765-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5890.7 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

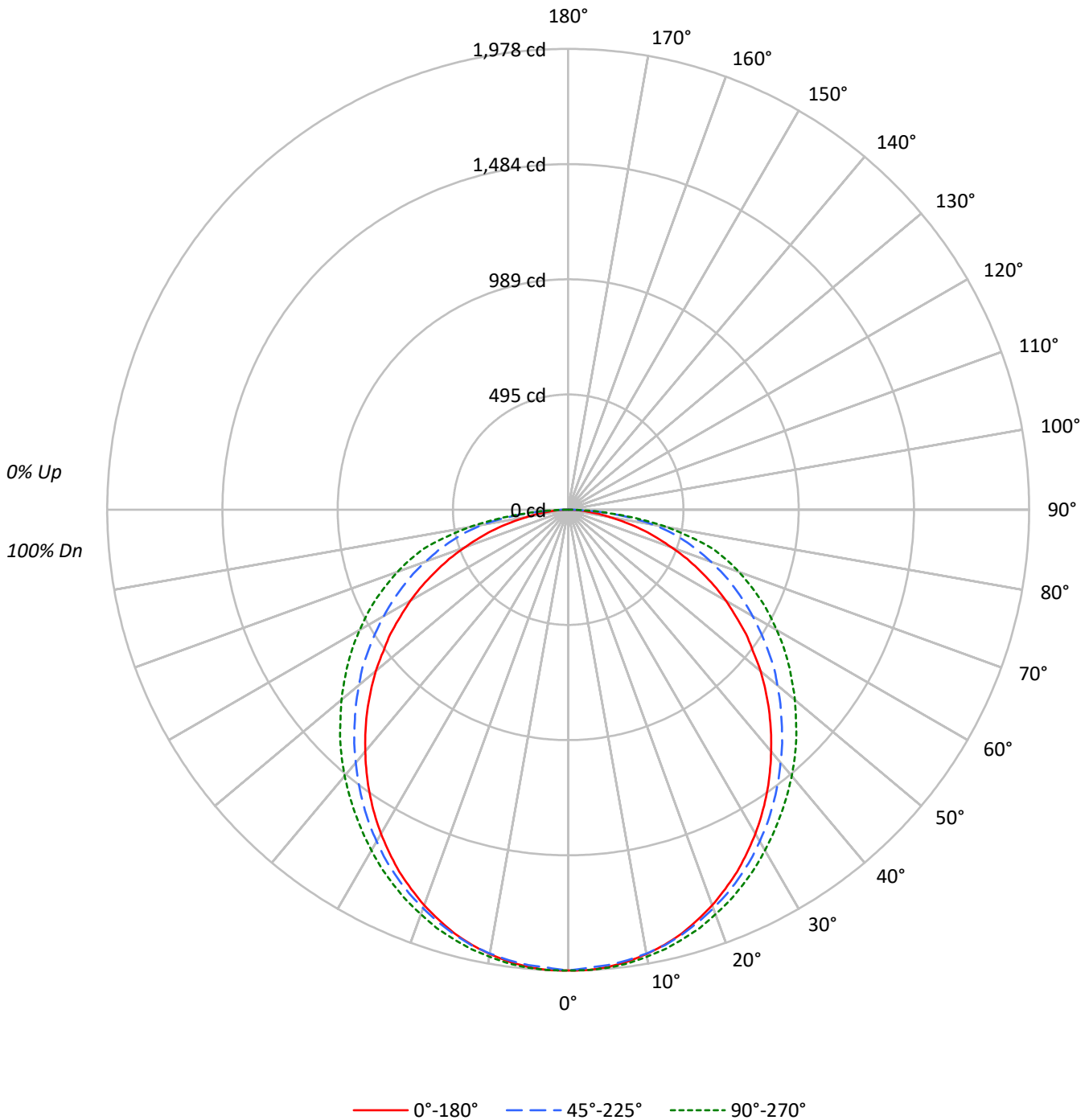
Input Watts (W): 54.312
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56					56			
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48					48			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41					41			
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36					36			
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32					32			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28					28			
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25					25			
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2661	2661	2661
5°	2661	2650	2666
10°	2646	2643	2662
15°	2623	2629	2656
20°	2587	2607	2646
25°	2545	2583	2636
30°	2495	2554	2624
35°	2441	2522	2616
40°	2379	2490	2621
45°	2319	2465	2634
50°	2255	2453	2658
55°	2186	2449	2707
60°	2100	2460	2778
65°	1990	2497	2898
70°	1849	2560	3063
75°	1686	2688	3322
80°	1386	2894	3321
85°	1062	2671	2853



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.1	3.2
10°-20°	534.0	9.1
20°-30°	803.6	13.6
30°-40°	963.0	16.3
40°-50°	1003.6	17.0
50°-60°	933.7	15.9
60°-70°	769.0	13.1
70°-80°	523.8	8.9
80°-90°	172.9	2.9
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°	1524.7	25.9
0°-40°	2487.7	42.2
0°-60°	4425.0	75.1
0°-90°	5890.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5890.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1978	1978	1978	1978	1978	
5°	1970	1970	1962	1972	1974	187
15°	1883	1885	1887	1905	1907	531
25°	1714	1722	1740	1769	1775	789
35°	1486	1504	1535	1577	1592	929
45°	1219	1244	1296	1360	1384	940
55°	932	963	1044	1126	1154	831
65°	625	678	784	877	910	621
75°	324	397	517	610	639	342
85°	69	134	173	185	185	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1977.8	1977.8	1977.8	1977.8	1977.8
2.5°	1977.8	1977.8	1968.0	1977.8	1977.8
5°	1969.9	1969.9	1962.1	1971.9	1973.9
7.5°	1956.2	1958.1	1950.3	1962.1	1964.0
10°	1936.5	1938.5	1934.5	1946.3	1948.3
12.5°	1912.9	1914.9	1914.9	1928.6	1930.6
15°	1883.4	1885.4	1887.4	1905.1	1907.0
17.5°	1846.1	1852.0	1855.9	1877.5	1881.5
20°	1806.8	1812.7	1820.5	1844.1	1848.0
22.5°	1761.5	1769.4	1783.2	1808.7	1814.6
25°	1714.4	1722.2	1739.9	1769.4	1775.3
27.5°	1661.3	1673.1	1694.7	1726.1	1734.0
30°	1606.2	1618.0	1643.6	1677.0	1688.8
32.5°	1547.2	1563.0	1592.5	1629.8	1641.6
35°	1486.3	1504.0	1535.4	1576.7	1592.5
37.5°	1421.4	1441.1	1478.4	1523.7	1543.3
40°	1354.6	1378.2	1417.5	1470.6	1492.2
42.5°	1287.7	1309.4	1358.5	1415.5	1439.1
45°	1218.9	1244.5	1295.6	1360.5	1384.1
47.5°	1148.1	1173.7	1234.6	1303.5	1325.1
50°	1077.4	1102.9	1171.7	1244.5	1270.0
52.5°	1000.7	1034.1	1112.8	1185.5	1211.1
55°	931.9	963.3	1043.9	1126.5	1154.0
57.5°	853.2	890.6	979.1	1065.6	1095.1
60°	780.5	819.8	914.2	1002.7	1032.2
62.5°	705.8	749.0	849.3	939.7	973.2
65°	625.2	678.3	784.4	876.8	910.3
67.5°	552.4	607.5	719.6	813.9	843.4
70°	469.9	536.7	650.7	745.1	778.5
72.5°	399.1	465.9	585.9	678.3	711.7
75°	324.4	397.1	517.1	609.5	639.0
77.5°	249.7	330.3	450.2	521.0	530.8
80°	178.9	263.4	373.5	414.8	428.6
82.5°	125.8	202.5	275.2	302.8	310.6
85°	68.8	133.7	173.0	184.8	184.8
87.5°	29.5	57.0	68.8	70.8	72.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)