

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: P276115

Luminaire Tested: **24CZ2-70HE-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276115  
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-L82765-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6297.5 lumens  
Efficiency: N/A  
Efficacy: 118.2 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

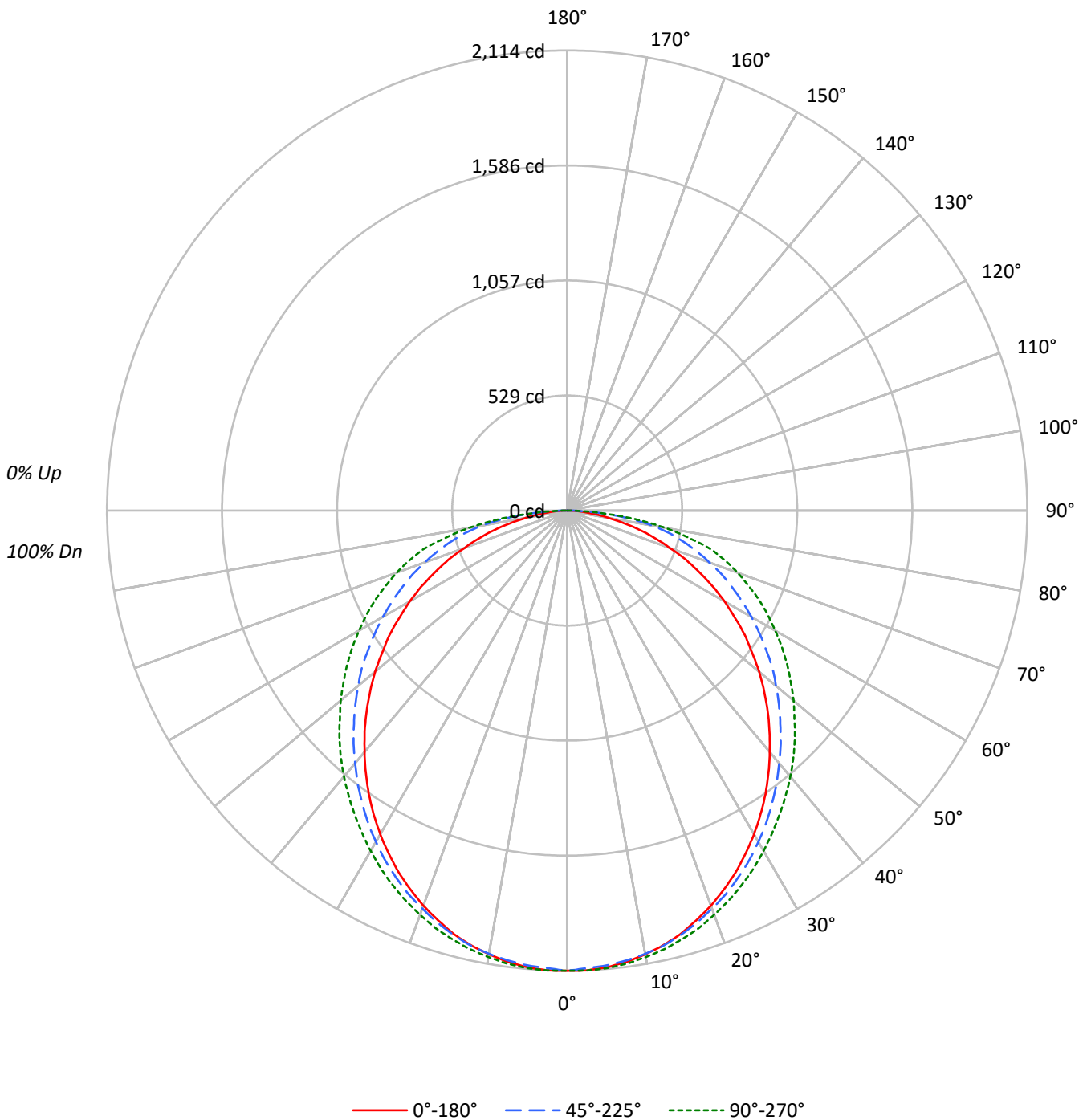
Input Watts (W): 53.289  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	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°	2845	2845	2845
5°	2844	2833	2850
10°	2828	2826	2846
15°	2805	2811	2840
20°	2766	2787	2829
25°	2721	2761	2818
30°	2668	2730	2805
35°	2610	2696	2796
40°	2543	2662	2802
45°	2480	2636	2815
50°	2411	2622	2842
55°	2337	2618	2894
60°	2245	2630	2969
65°	2128	2670	3098
70°	1976	2737	3274
75°	1803	2874	3551
80°	1482	3094	3550
85°	1136	2856	3051



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.0	3.2
10°-20°	570.9	9.1
20°-30°	859.1	13.6
30°-40°	1029.5	16.3
40°-50°	1072.9	17.0
50°-60°	998.2	15.9
60°-70°	822.1	13.1
70°-80°	559.9	8.9
80°-90°	184.9	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°	1630.0	25.9
0°-40°	2659.5	42.2
0°-60°	4730.6	75.1
0°-90°	6297.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6297.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2114	2114	2114	2114	2114	
5°	2106	2106	2098	2108	2110	200
15°	2014	2016	2018	2037	2039	567
25°	1833	1841	1860	1892	1898	844
35°	1589	1608	1642	1686	1702	993
45°	1303	1330	1385	1454	1480	1005
55°	996	1030	1116	1204	1234	888
65°	668	725	839	937	973	663
75°	347	425	553	652	683	366
85°	74	143	185	198	198	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2114.4	2114.4	2114.4	2114.4	2114.4
2.5°	2114.4	2114.4	2103.9	2114.4	2114.4
5°	2106.0	2106.0	2097.6	2108.1	2110.2
7.5°	2091.3	2093.4	2084.9	2097.6	2099.7
10°	2070.2	2072.3	2068.1	2080.7	2082.8
12.5°	2045.0	2047.1	2047.1	2061.8	2063.9
15°	2013.5	2015.6	2017.7	2036.6	2038.7
17.5°	1973.6	1979.9	1984.1	2007.2	2011.4
20°	1931.5	1937.8	1946.2	1971.5	1975.7
22.5°	1883.2	1891.6	1906.3	1933.6	1939.9
25°	1832.7	1841.1	1860.1	1891.6	1897.9
27.5°	1776.0	1788.6	1811.7	1845.3	1853.8
30°	1717.1	1729.7	1757.1	1792.8	1805.4
32.5°	1654.1	1670.9	1702.4	1742.4	1755.0
35°	1588.9	1607.8	1641.5	1685.6	1702.4
37.5°	1519.6	1540.6	1580.5	1628.9	1649.9
40°	1448.1	1473.3	1515.4	1572.1	1595.2
42.5°	1376.7	1399.8	1452.3	1513.3	1538.5
45°	1303.1	1330.4	1385.1	1454.4	1479.6
47.5°	1227.4	1254.8	1319.9	1393.5	1416.6
50°	1151.8	1179.1	1252.6	1330.4	1357.7
52.5°	1069.8	1105.5	1189.6	1267.4	1294.7
55°	996.2	1029.9	1116.0	1204.3	1233.7
57.5°	912.2	952.1	1046.7	1139.2	1170.7
60°	834.4	876.4	977.3	1071.9	1103.4
62.5°	754.5	800.8	908.0	1004.6	1040.4
65°	668.4	725.1	838.6	937.4	973.1
67.5°	590.6	649.4	769.2	870.1	901.7
70°	502.3	573.8	695.7	796.6	832.3
72.5°	426.7	498.1	626.3	725.1	760.8
75°	346.8	424.6	552.8	651.5	683.1
77.5°	266.9	353.1	481.3	557.0	567.5
80°	191.3	281.6	399.3	443.5	458.2
82.5°	134.5	216.5	294.2	323.7	332.1
85°	73.6	142.9	185.0	197.6	197.6
87.5°	31.5	61.0	73.6	75.7	77.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)