

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: P276113

Luminaire Tested: **24CZ2-65HE-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276113  
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: 24CZ2-65HE-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6463.1 lumens  
Efficiency: N/A  
Efficacy: 126.6 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

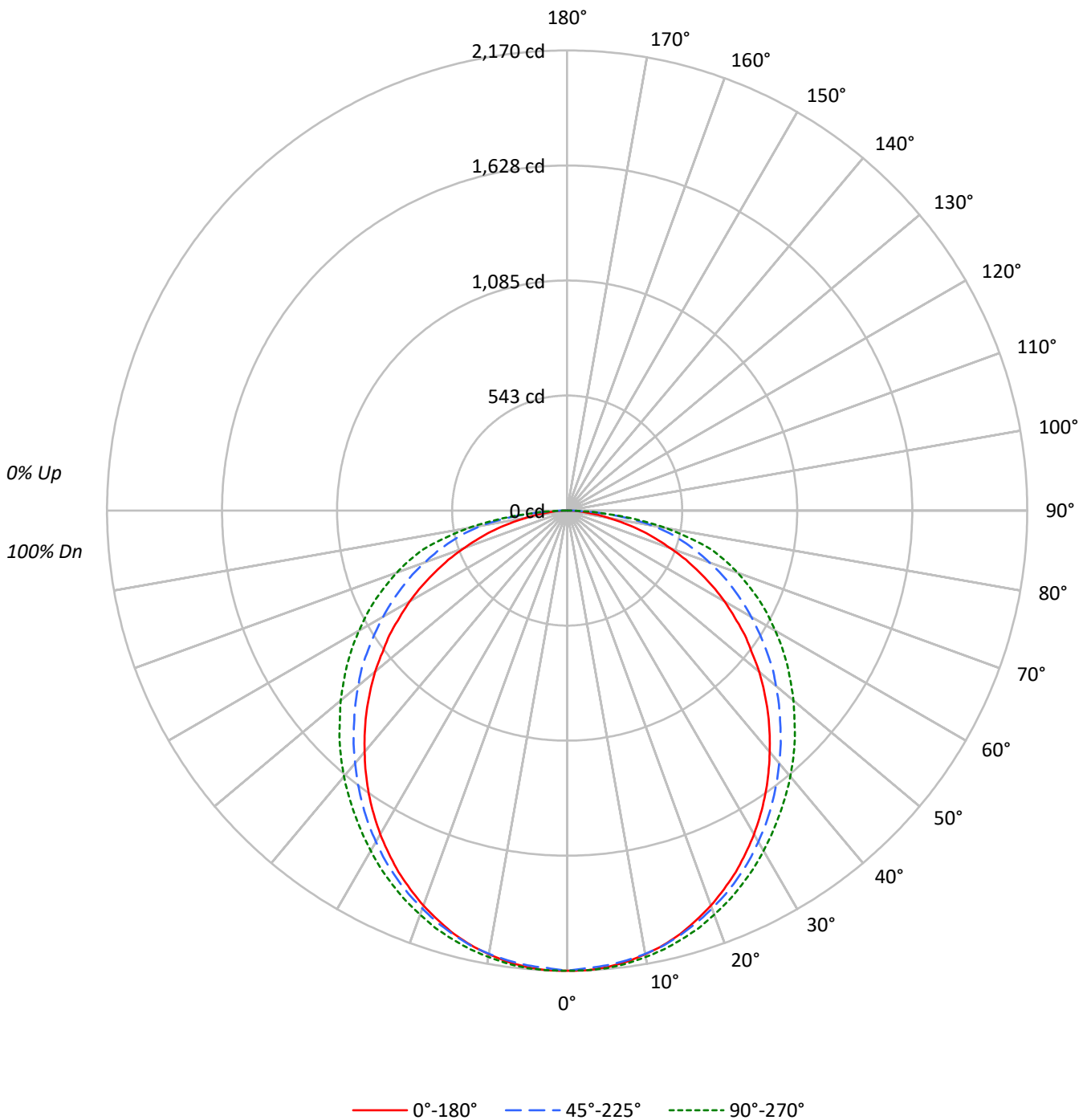
Input Watts (W): 51.057  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2920	2920	2920
5°	2919	2907	2925
10°	2903	2900	2920
15°	2878	2884	2914
20°	2838	2860	2903
25°	2792	2834	2892
30°	2738	2802	2879
35°	2678	2767	2870
40°	2610	2732	2876
45°	2545	2705	2889
50°	2474	2691	2917
55°	2398	2687	2970
60°	2304	2699	3047
65°	2184	2740	3180
70°	2028	2809	3360
75°	1850	2949	3644
80°	1521	3175	3643
85°	1166	2930	3131



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.2	3.2
10°-20°	585.9	9.1
20°-30°	881.7	13.6
30°-40°	1056.6	16.3
40°-50°	1101.1	17.0
50°-60°	1024.4	15.9
60°-70°	843.8	13.1
70°-80°	574.6	8.9
80°-90°	189.7	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°	1672.8	25.9
0°-40°	2729.4	42.2
0°-60°	4855.0	75.1
0°-90°	6463.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6463.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2170	2170	2170	2170	2170	
5°	2161	2161	2153	2164	2166	205
15°	2066	2069	2071	2090	2092	582
25°	1881	1890	1909	1941	1948	866
35°	1631	1650	1685	1730	1747	1019
45°	1337	1365	1422	1493	1518	1031
55°	1022	1057	1145	1236	1266	911
65°	686	744	861	962	999	681
75°	356	436	567	669	701	375
85°	76	147	190	203	203	94
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2170.0	2170.0	2170.0	2170.0	2170.0
2.5°	2170.0	2170.0	2159.2	2170.0	2170.0
5°	2161.3	2161.3	2152.7	2163.5	2165.6
7.5°	2146.2	2148.4	2139.8	2152.7	2154.9
10°	2124.7	2126.8	2122.5	2135.4	2137.6
12.5°	2098.8	2100.9	2100.9	2116.0	2118.2
15°	2066.4	2068.6	2070.7	2090.1	2092.3
17.5°	2025.4	2031.9	2036.2	2059.9	2064.3
20°	1982.3	1988.8	1997.4	2023.3	2027.6
22.5°	1932.7	1941.3	1956.4	1984.5	1990.9
25°	1880.9	1889.5	1909.0	1941.3	1947.8
27.5°	1822.7	1835.6	1859.3	1893.9	1902.5
30°	1762.3	1775.2	1803.3	1839.9	1852.9
32.5°	1697.6	1714.8	1747.2	1788.2	1801.1
35°	1630.7	1650.1	1684.6	1729.9	1747.2
37.5°	1559.5	1581.1	1622.1	1671.7	1693.3
40°	1486.2	1512.1	1555.2	1613.4	1637.2
42.5°	1412.8	1436.6	1490.5	1553.0	1578.9
45°	1337.3	1365.4	1421.5	1492.7	1518.5
47.5°	1259.7	1287.7	1354.6	1430.1	1453.8
50°	1182.0	1210.1	1285.6	1365.4	1393.4
52.5°	1097.9	1134.6	1220.9	1300.7	1328.7
55°	1022.4	1056.9	1145.4	1236.0	1266.2
57.5°	936.1	977.1	1074.2	1169.1	1201.5
60°	856.3	899.5	1003.0	1100.1	1132.4
62.5°	774.4	821.8	931.8	1031.1	1067.7
65°	685.9	744.2	860.6	962.0	998.7
67.5°	606.1	666.5	789.5	893.0	925.4
70°	515.5	588.9	714.0	817.5	854.2
72.5°	437.9	511.2	642.8	744.2	780.8
75°	355.9	435.7	567.3	668.7	701.0
77.5°	273.9	362.4	494.0	571.6	582.4
80°	196.3	289.0	409.8	455.1	470.2
82.5°	138.0	222.2	302.0	332.2	340.8
85°	75.5	146.7	189.8	202.8	202.8
87.5°	32.4	62.6	75.5	77.7	79.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)