

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: P276545

Luminaire Tested: **24CZ2-75HE-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276545  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-75HE-S-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7317.8 lumens  
Efficiency: N/A  
Efficacy: 124.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

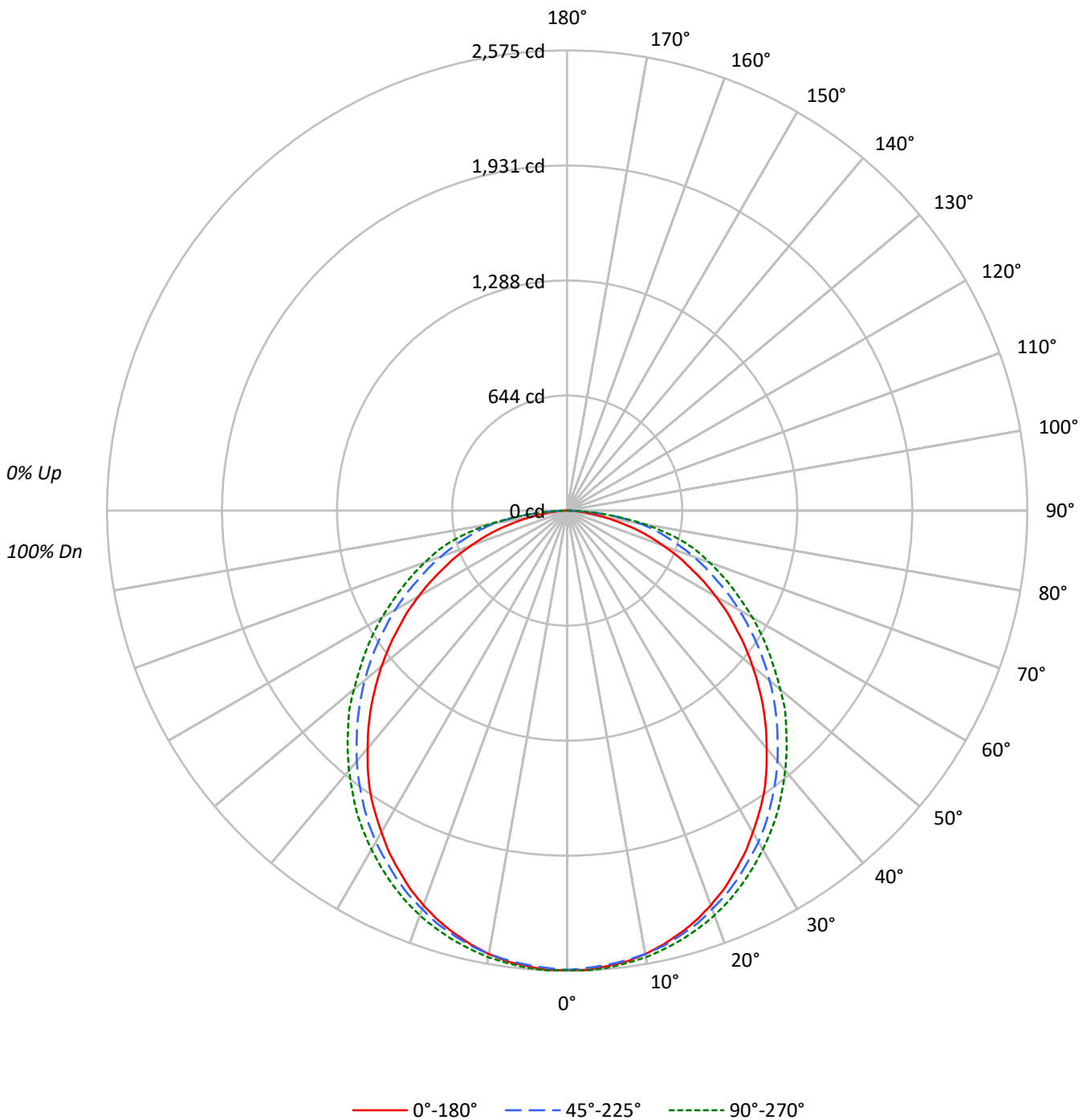
Input Watts (W): 58.683  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3459	3459	3459
5°	3457	3447	3469
10°	3442	3442	3468
15°	3409	3426	3461
20°	3365	3398	3451
25°	3302	3365	3430
30°	3228	3326	3402
35°	3157	3272	3375
40°	3050	3217	3335
45°	2950	3154	3299
50°	2837	3094	3260
55°	2710	3037	3228
60°	2583	2990	3221
65°	2420	2938	3241
70°	2240	2954	3329
75°	2006	3009	3516
80°	1621	3188	3440
85°	1220	2799	2728



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	243.4	3.3
10°-20°	695.4	9.5
20°-30°	1045.4	14.3
30°-40°	1245.2	17.0
40°-50°	1274.4	17.4
50°-60°	1147.3	15.7
60°-70°	901.0	12.3
70°-80°	584.8	8.0
80°-90°	180.9	2.5
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°	1984.2	27.1
0°-40°	3229.4	44.1
0°-60°	5651.1	77.2
0°-90°	7317.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7317.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2571	2571	2571	2571	2571	
5°	2559	2564	2552	2566	2568	243
15°	2448	2455	2459	2480	2485	690
25°	2224	2243	2266	2304	2310	1025
35°	1922	1946	1992	2041	2055	1199
45°	1550	1588	1657	1720	1734	1195
55°	1155	1206	1295	1362	1376	1036
65°	760	818	923	1000	1018	757
75°	386	460	579	658	676	408
85°	79	146	181	177	177	95
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2570.8	2570.8	2570.8	2570.8	2570.8
2.5°	2573.1	2573.1	2561.5	2573.1	2575.4
5°	2559.2	2563.8	2552.2	2566.1	2568.5
7.5°	2545.2	2545.2	2538.2	2552.2	2554.5
10°	2519.6	2522.0	2519.6	2535.9	2538.2
12.5°	2487.1	2491.8	2494.1	2510.4	2512.7
15°	2447.6	2454.6	2459.2	2480.1	2484.8
17.5°	2403.4	2410.4	2422.0	2445.3	2449.9
20°	2350.0	2359.3	2373.2	2403.4	2410.4
22.5°	2291.9	2301.2	2324.4	2352.3	2363.9
25°	2224.5	2243.0	2266.3	2303.5	2310.5
27.5°	2157.0	2173.3	2203.5	2243.0	2252.3
30°	2078.0	2103.6	2140.8	2180.3	2189.6
32.5°	2001.3	2026.9	2071.0	2112.9	2124.5
35°	1922.3	1945.5	1992.0	2040.8	2054.8
37.5°	1831.6	1861.8	1913.0	1961.8	1975.7
40°	1736.3	1773.5	1831.6	1882.8	1899.0
42.5°	1645.7	1685.2	1743.3	1799.1	1817.7
45°	1550.4	1587.6	1657.3	1720.1	1734.0
47.5°	1452.7	1494.6	1569.0	1631.7	1655.0
50°	1355.1	1399.3	1478.3	1543.4	1557.3
52.5°	1257.5	1304.0	1387.7	1457.4	1464.4
55°	1155.2	1206.4	1294.7	1362.1	1376.0
57.5°	1062.3	1106.4	1201.7	1271.4	1287.7
60°	960.0	1008.8	1111.1	1176.1	1197.1
62.5°	862.4	913.5	1020.4	1085.5	1104.1
65°	760.1	818.2	922.8	999.5	1018.1
67.5°	671.8	727.5	839.1	913.5	932.1
70°	569.5	632.2	750.8	827.5	846.1
72.5°	481.2	546.2	664.8	739.2	767.1
75°	385.9	460.2	578.8	657.8	676.4
77.5°	292.9	378.9	499.7	560.2	560.2
80°	209.2	299.8	411.4	439.3	444.0
82.5°	137.1	225.5	304.5	302.2	302.2
85°	79.0	146.4	181.3	176.7	176.7
87.5°	30.2	60.4	65.1	65.1	62.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)