

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: P276131

Luminaire Tested: **24CZ2-75HE-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276131  
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: 24CZ2-75HE-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: 7453.5 lumens  
Efficiency: N/A  
Efficacy: 122.2 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

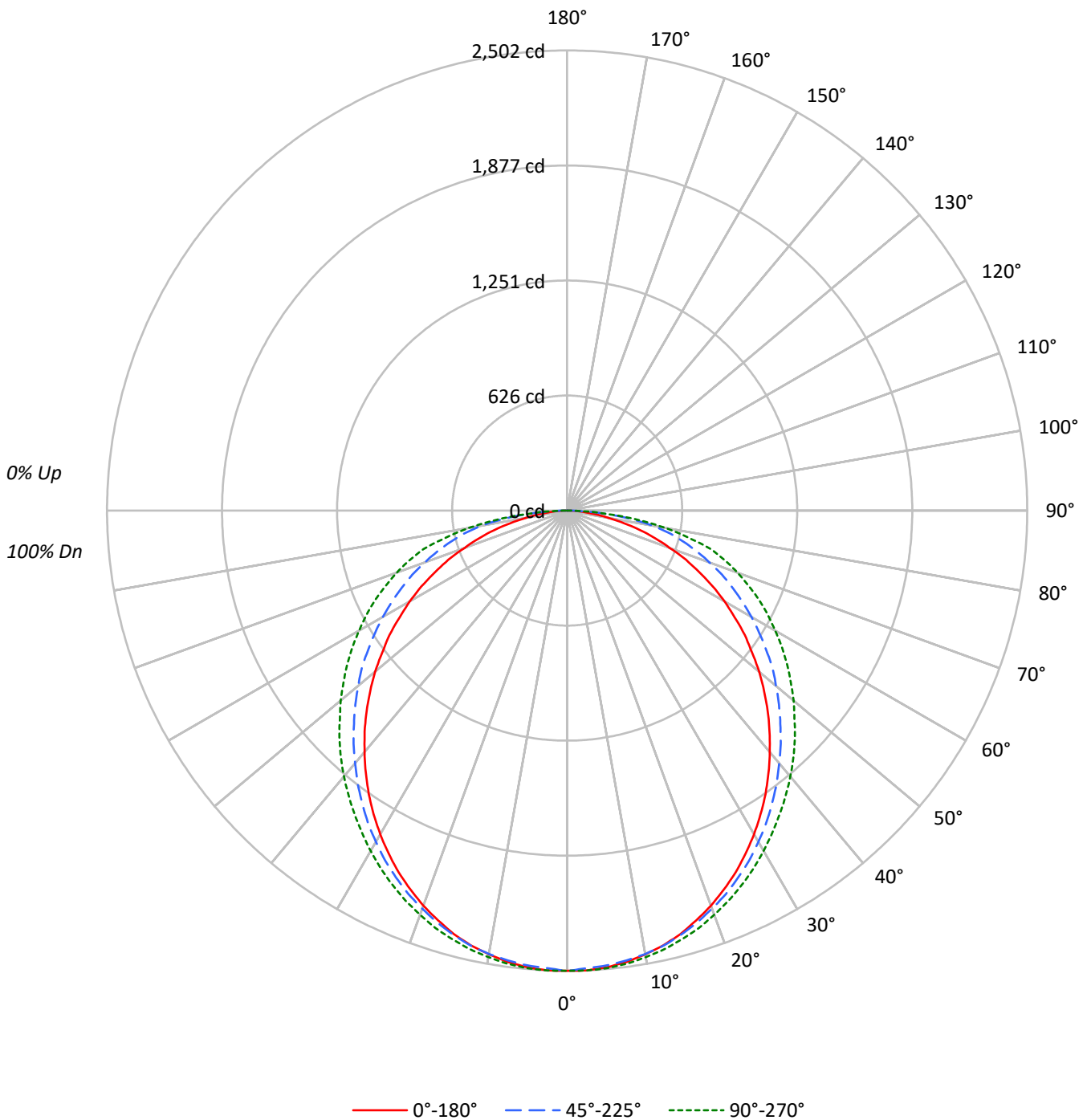
Input Watts (W): 61.008  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3367	3367	3367
5°	3366	3353	3373
10°	3348	3344	3368
15°	3320	3327	3361
20°	3273	3298	3348
25°	3220	3268	3335
30°	3157	3231	3320
35°	3089	3191	3310
40°	3010	3150	3316
45°	2935	3119	3332
50°	2853	3103	3364
55°	2766	3099	3425
60°	2658	3113	3514
65°	2518	3160	3667
70°	2339	3239	3875
75°	2133	3401	4203
80°	1754	3662	4202
85°	1345	3379	3609



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.7	3.2
10°-20°	675.7	9.1
20°-30°	1016.8	13.6
30°-40°	1218.5	16.3
40°-50°	1269.8	17.0
50°-60°	1181.4	15.9
60°-70°	973.1	13.1
70°-80°	662.7	8.9
80°-90°	218.8	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°	1929.2	25.9
0°-40°	3147.7	42.2
0°-60°	5599.0	75.1
0°-90°	7453.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7453.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2502	2502	2502	2502	2502	
5°	2492	2492	2483	2495	2498	237
15°	2383	2386	2388	2410	2413	671
25°	2169	2179	2202	2239	2246	999
35°	1881	1903	1943	1995	2015	1176
45°	1542	1575	1639	1721	1751	1190
55°	1179	1219	1321	1425	1460	1051
65°	791	858	992	1110	1152	785
75°	410	502	654	771	808	433
85°	87	169	219	234	234	108
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2502.5	2502.5	2502.5	2502.5	2502.5
2.5°	2502.5	2502.5	2490.1	2502.5	2502.5
5°	2492.5	2492.5	2482.6	2495.0	2497.5
7.5°	2475.1	2477.6	2467.7	2482.6	2485.1
10°	2450.3	2452.7	2447.8	2462.7	2465.2
12.5°	2420.4	2422.9	2422.9	2440.3	2442.8
15°	2383.1	2385.6	2388.1	2410.5	2412.9
17.5°	2335.8	2343.3	2348.3	2375.6	2380.6
20°	2286.1	2293.5	2303.5	2333.3	2338.3
22.5°	2228.9	2238.8	2256.2	2288.6	2296.0
25°	2169.2	2179.1	2201.5	2238.8	2246.3
27.5°	2102.0	2116.9	2144.3	2184.1	2194.0
30°	2032.3	2047.3	2079.6	2121.9	2136.8
32.5°	1957.7	1977.6	2014.9	2062.2	2077.1
35°	1880.6	1903.0	1942.8	1995.0	2014.9
37.5°	1798.5	1823.4	1870.7	1927.9	1952.7
40°	1713.9	1743.8	1793.5	1860.7	1888.1
42.5°	1629.4	1656.7	1718.9	1791.1	1820.9
45°	1542.3	1574.6	1639.3	1721.4	1751.3
47.5°	1452.7	1485.1	1562.2	1649.3	1676.6
50°	1363.2	1395.5	1482.6	1574.6	1607.0
52.5°	1266.2	1308.5	1408.0	1500.0	1532.3
55°	1179.1	1218.9	1320.9	1425.4	1460.2
57.5°	1079.6	1126.9	1238.8	1348.3	1385.6
60°	987.6	1037.3	1156.7	1268.7	1306.0
62.5°	893.0	947.8	1074.6	1189.1	1231.3
65°	791.0	858.2	992.5	1109.5	1151.7
67.5°	699.0	768.7	910.5	1029.9	1067.2
70°	594.5	679.1	823.4	942.8	985.1
72.5°	505.0	589.6	741.3	858.2	900.5
75°	410.4	502.5	654.2	771.1	808.5
77.5°	315.9	417.9	569.7	659.2	671.6
80°	226.4	333.3	472.6	524.9	542.3
82.5°	159.2	256.2	348.3	383.1	393.0
85°	87.1	169.2	218.9	233.8	233.8
87.5°	37.3	72.1	87.1	89.6	92.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)