

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: P275940

Luminaire Tested: **24CZ2-75HE-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275940  
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-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7559.0 lumens  
Efficiency: N/A  
Efficacy: 123.3 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

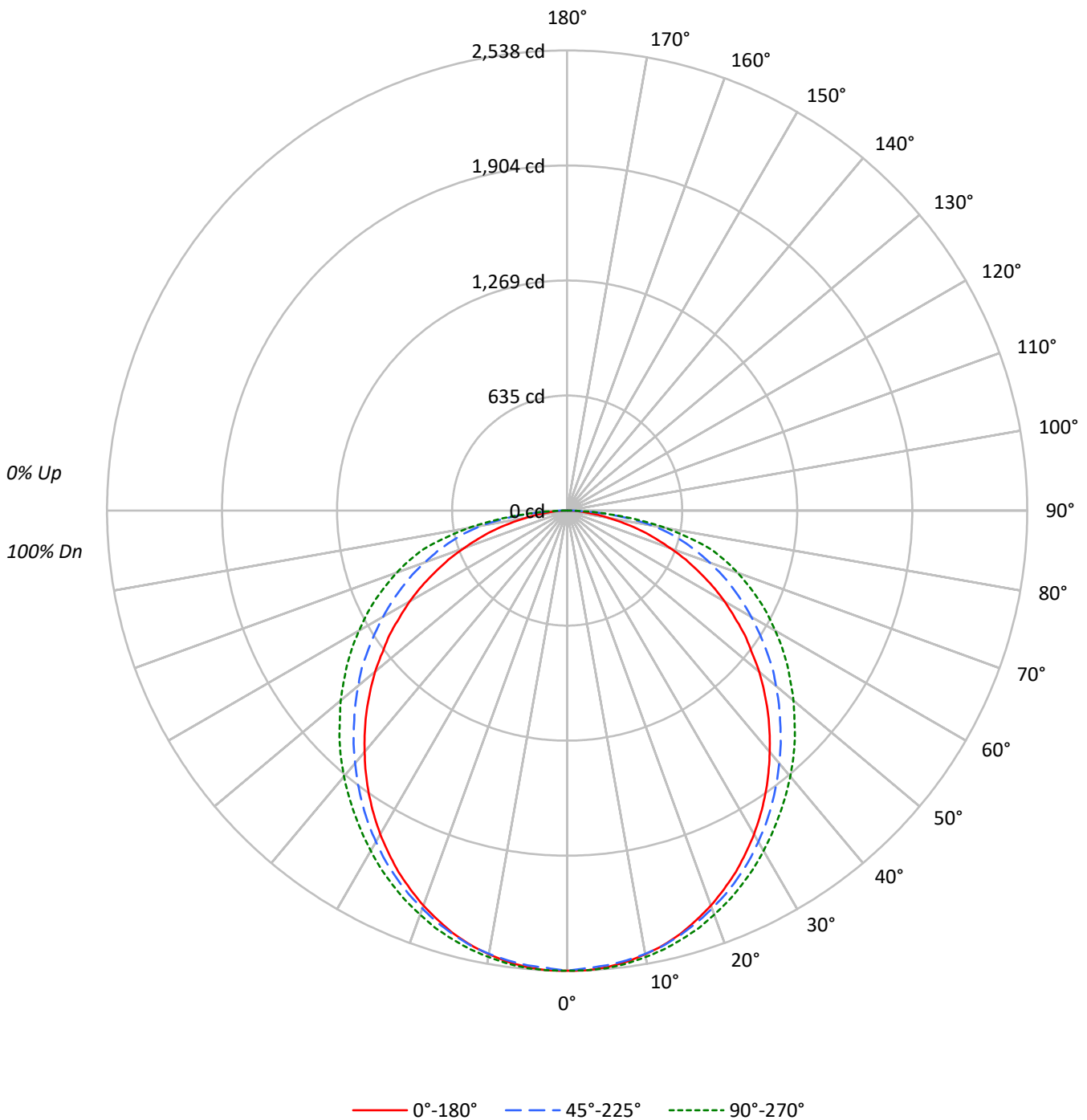
Input Watts (W): 61.287  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3415	3415	3415
5°	3414	3400	3421
10°	3395	3392	3416
15°	3366	3374	3409
20°	3320	3345	3395
25°	3266	3315	3382
30°	3202	3277	3367
35°	3133	3236	3356
40°	3053	3195	3363
45°	2976	3163	3379
50°	2894	3147	3411
55°	2805	3142	3474
60°	2695	3157	3564
65°	2554	3205	3719
70°	2372	3285	3930
75°	2164	3449	4262
80°	1779	3714	4262
85°	1363	3427	3660



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	240.0	3.2
10°-20°	685.3	9.1
20°-30°	1031.2	13.6
30°-40°	1235.8	16.3
40°-50°	1287.8	17.0
50°-60°	1198.2	15.9
60°-70°	986.8	13.1
70°-80°	672.1	8.9
80°-90°	221.9	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°	1956.5	25.9
0°-40°	3192.2	42.2
0°-60°	5678.2	75.1
0°-90°	7559.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7559.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2538	2538	2538	2538	2538	
5°	2528	2528	2518	2530	2533	240
15°	2417	2419	2422	2445	2447	681
25°	2200	2210	2233	2270	2278	1013
35°	1907	1930	1970	2023	2043	1192
45°	1564	1597	1662	1746	1776	1206
55°	1196	1236	1340	1446	1481	1066
65°	802	870	1007	1125	1168	796
75°	416	510	664	782	820	439
85°	88	172	222	237	237	109
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2537.9	2537.9	2537.9	2537.9	2537.9
2.5°	2537.9	2537.9	2525.3	2537.9	2537.9
5°	2527.8	2527.8	2517.7	2530.3	2532.9
7.5°	2510.2	2512.7	2502.6	2517.7	2520.2
10°	2484.9	2487.5	2482.4	2497.5	2500.1
12.5°	2454.7	2457.2	2457.2	2474.8	2477.4
15°	2416.8	2419.3	2421.9	2444.6	2447.1
17.5°	2368.9	2376.5	2381.5	2409.2	2414.3
20°	2318.4	2326.0	2336.1	2366.4	2371.4
22.5°	2260.4	2270.5	2288.2	2320.9	2328.5
25°	2199.9	2209.9	2232.7	2270.5	2278.1
27.5°	2131.7	2146.9	2174.6	2215.0	2225.1
30°	2061.1	2076.2	2109.0	2151.9	2167.1
32.5°	1985.4	2005.6	2043.4	2091.4	2106.5
35°	1907.2	1929.9	1970.3	2023.3	2043.4
37.5°	1824.0	1849.2	1897.1	1955.1	1980.4
40°	1738.2	1768.5	1818.9	1887.0	1914.8
42.5°	1652.4	1680.2	1743.2	1816.4	1846.7
45°	1564.1	1596.9	1662.5	1745.8	1776.0
47.5°	1473.3	1506.1	1584.3	1672.6	1700.3
50°	1382.5	1415.3	1503.6	1596.9	1629.7
52.5°	1284.1	1327.0	1427.9	1521.2	1554.0
55°	1195.8	1236.2	1339.6	1445.5	1480.9
57.5°	1094.9	1142.8	1256.3	1367.3	1405.2
60°	1001.5	1052.0	1173.1	1286.6	1324.5
62.5°	905.7	961.2	1089.8	1205.9	1248.8
65°	802.2	870.4	1006.6	1125.2	1168.0
67.5°	708.9	779.5	923.3	1044.4	1082.3
70°	602.9	688.7	835.0	956.1	999.0
72.5°	512.1	597.9	751.8	870.4	913.2
75°	416.3	509.6	663.5	782.1	819.9
77.5°	320.4	423.8	577.7	668.5	681.1
80°	229.6	338.1	479.3	532.3	550.0
82.5°	161.5	259.8	353.2	388.5	398.6
85°	88.3	171.5	222.0	237.1	237.1
87.5°	37.8	73.2	88.3	90.8	93.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)