

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: P277098

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277098  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-75HE-RDP-UNV-L92765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3758.3 lumens  
Efficiency: N/A  
Efficacy: 64.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

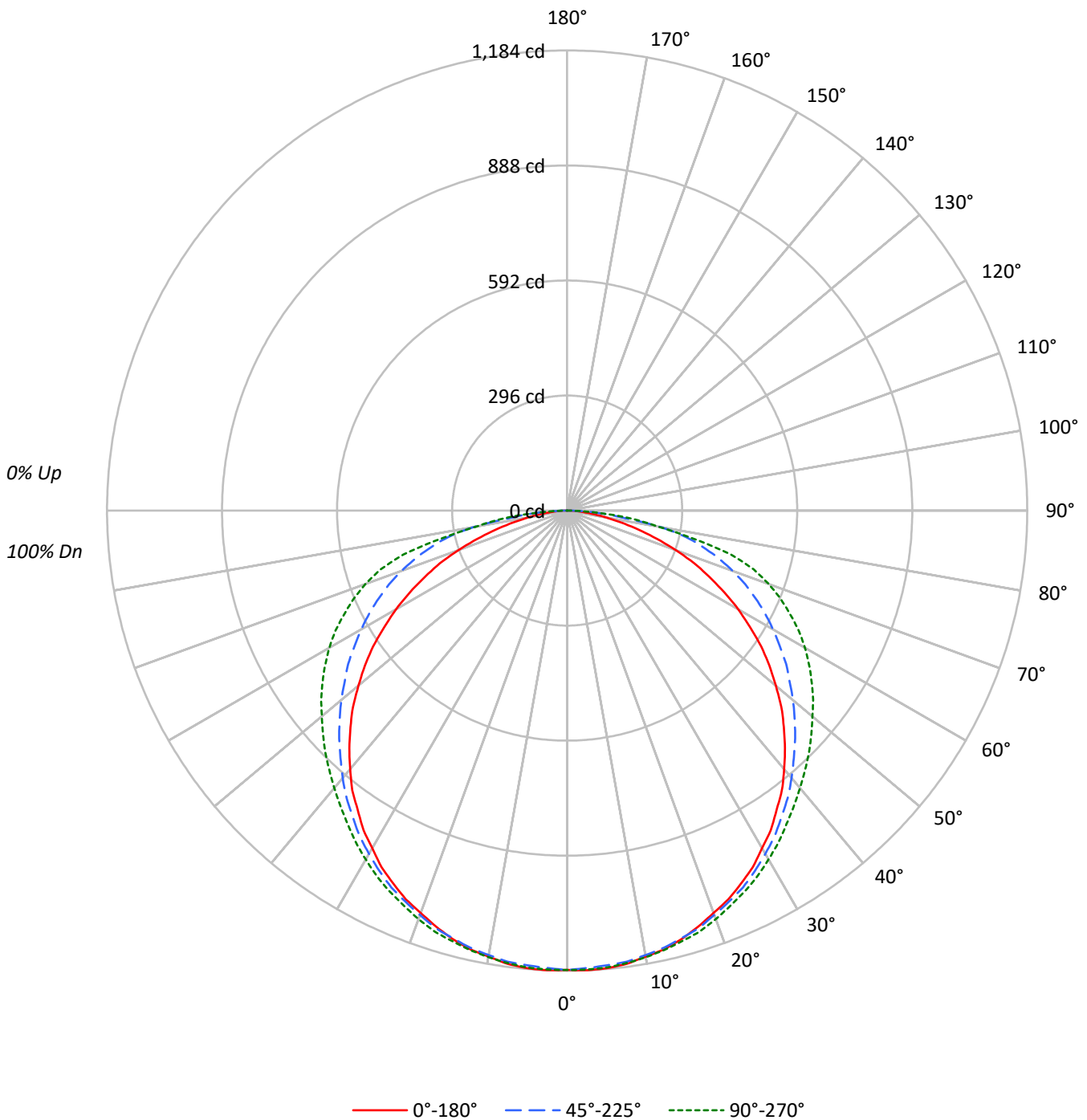
Input Watts (W): 58.311  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1590	1590	1590
5°	1596	1586	1594
10°	1592	1587	1594
15°	1589	1587	1597
20°	1577	1585	1602
25°	1572	1589	1605
30°	1558	1584	1610
35°	1543	1580	1617
40°	1526	1578	1637
45°	1500	1579	1674
50°	1467	1588	1725
55°	1430	1614	1802
60°	1369	1645	1901
65°	1282	1703	2018
70°	1166	1782	2171
75°	988	1880	2268
80°	780	1892	1834
85°	576	1439	1612



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.1	3.0
10°-20°	322.7	8.6
20°-30°	493.4	13.1
30°-40°	603.2	16.0
40°-50°	642.9	17.1
50°-60°	614.7	16.4
60°-70°	520.7	13.9
70°-80°	350.0	9.3
80°-90°	98.7	2.6
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°	928.2	24.7
0°-40°	1531.4	40.7
0°-60°	2788.9	74.2
0°-90°	3758.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3758.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1182	1182	1182	1182	1182	
5°	1182	1180	1174	1180	1180	112
15°	1141	1141	1139	1148	1146	322
25°	1059	1063	1070	1079	1081	488
35°	940	947	962	980	984	589
45°	788	802	830	865	880	608
55°	610	632	688	742	768	543
65°	403	444	535	606	634	400
75°	190	259	362	423	436	204
85°	37	76	93	101	104	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1181.9	1181.9	1181.9	1181.9	1181.9
2.5°	1183.7	1183.7	1178.1	1181.9	1181.9
5°	1181.9	1180.0	1174.4	1180.0	1180.0
7.5°	1176.3	1174.4	1170.7	1176.3	1174.4
10°	1165.1	1165.1	1161.4	1167.0	1167.0
12.5°	1155.8	1153.9	1152.1	1159.5	1157.6
15°	1140.9	1140.9	1139.0	1148.3	1146.5
17.5°	1122.2	1124.1	1126.0	1133.4	1135.3
20°	1101.7	1105.4	1107.3	1118.5	1118.5
22.5°	1083.1	1084.9	1088.7	1099.9	1099.9
25°	1058.8	1062.6	1070.0	1079.3	1081.2
27.5°	1034.6	1036.5	1045.8	1058.8	1060.7
30°	1002.9	1008.5	1019.7	1034.6	1036.5
32.5°	975.0	980.5	993.6	1008.5	1012.2
35°	939.5	947.0	961.9	980.5	984.3
37.5°	907.8	913.4	932.1	952.6	958.2
40°	868.7	879.9	898.5	922.8	932.1
42.5°	829.6	840.7	863.1	894.8	906.0
45°	788.5	801.6	829.6	865.0	879.9
47.5°	747.5	762.4	794.1	835.1	851.9
50°	700.9	719.6	758.7	805.3	824.0
52.5°	656.2	678.6	721.4	773.6	797.9
55°	609.6	632.0	687.9	741.9	768.0
57.5°	557.4	587.2	648.7	710.2	738.2
60°	508.9	536.9	611.4	678.6	706.5
62.5°	456.7	494.0	574.2	645.0	673.0
65°	402.7	443.7	535.0	605.9	633.8
67.5°	354.2	398.9	495.9	566.7	594.7
70°	296.4	352.3	453.0	523.8	551.8
72.5°	242.3	303.9	408.3	477.2	503.3
75°	190.1	259.1	361.6	423.2	436.2
77.5°	141.7	214.4	313.2	339.3	330.0
80°	100.7	171.5	244.2	231.2	236.7
82.5°	65.2	130.5	151.0	171.5	177.1
85°	37.3	76.4	93.2	100.7	104.4
87.5°	16.8	28.0	37.3	37.3	35.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)