

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: P276966

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276966  
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-L82765-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4787.1 lumens  
Efficiency: N/A  
Efficacy: 81.1 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

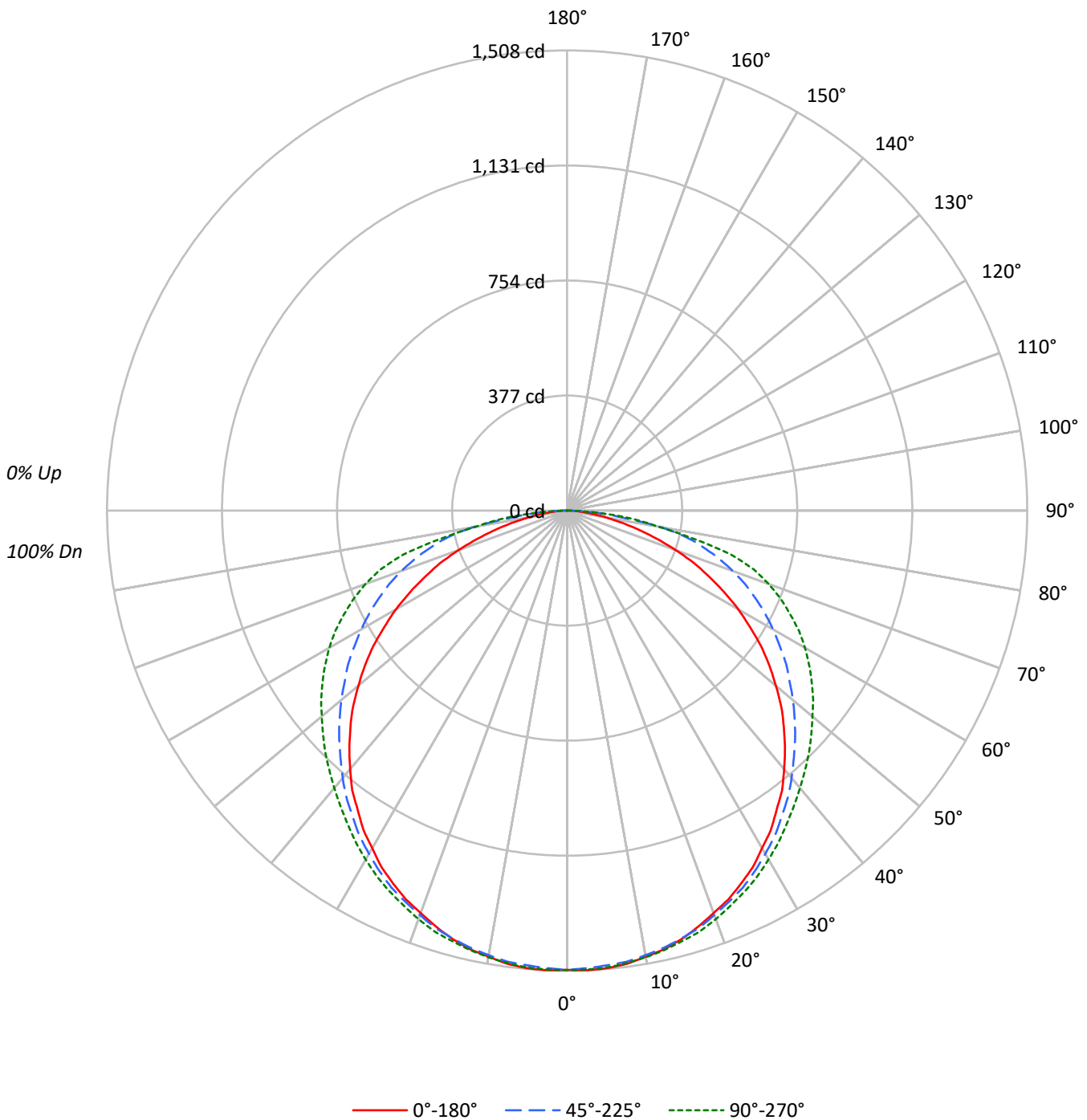
Input Watts (W): 59.055  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2025	2025	2025
5°	2033	2020	2030
10°	2028	2021	2031
15°	2024	2021	2034
20°	2009	2019	2040
25°	2002	2023	2045
30°	1985	2018	2051
35°	1966	2012	2059
40°	1943	2010	2085
45°	1911	2011	2132
50°	1869	2023	2197
55°	1821	2055	2295
60°	1744	2096	2422
65°	1633	2170	2570
70°	1485	2270	2765
75°	1259	2394	2888
80°	993	2411	2337
85°	733	1832	2053



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.8	3.0
10°-20°	411.0	8.6
20°-30°	628.5	13.1
30°-40°	768.3	16.0
40°-50°	818.9	17.1
50°-60°	782.9	16.4
60°-70°	663.2	13.9
70°-80°	445.8	9.3
80°-90°	125.7	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°	1182.3	24.7
0°-40°	1950.6	40.7
0°-60°	3552.4	74.2
0°-90°	4787.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4787.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1505	1505	1505	1505	1505	
5°	1505	1503	1496	1503	1503	143
15°	1453	1453	1451	1463	1460	410
25°	1349	1353	1363	1375	1377	622
35°	1197	1206	1225	1249	1254	750
45°	1004	1021	1057	1102	1121	775
55°	776	805	876	945	978	692
65°	513	565	682	772	807	509
75°	242	330	461	539	556	259
85°	48	97	119	128	133	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1505.4	1505.4	1505.4	1505.4	1505.4
2.5°	1507.8	1507.8	1500.7	1505.4	1505.4
5°	1505.4	1503.0	1495.9	1503.0	1503.0
7.5°	1498.3	1495.9	1491.2	1498.3	1495.9
10°	1484.0	1484.0	1479.3	1486.4	1486.4
12.5°	1472.2	1469.8	1467.4	1476.9	1474.5
15°	1453.2	1453.2	1450.8	1462.7	1460.3
17.5°	1429.4	1431.8	1434.2	1443.7	1446.0
20°	1403.3	1408.1	1410.4	1424.7	1424.7
22.5°	1379.6	1381.9	1386.7	1400.9	1400.9
25°	1348.7	1353.4	1362.9	1374.8	1377.2
27.5°	1317.8	1320.2	1332.1	1348.7	1351.1
30°	1277.5	1284.6	1298.8	1317.8	1320.2
32.5°	1241.8	1249.0	1265.6	1284.6	1289.3
35°	1196.7	1206.2	1225.2	1249.0	1253.7
37.5°	1156.4	1163.5	1187.2	1213.3	1220.5
40°	1106.5	1120.7	1144.5	1175.4	1187.2
42.5°	1056.6	1070.9	1099.4	1139.7	1154.0
45°	1004.4	1021.0	1056.6	1101.7	1120.7
47.5°	952.2	971.2	1011.5	1063.8	1085.1
50°	892.8	916.5	966.4	1025.8	1049.5
52.5°	835.8	864.3	918.9	985.4	1016.3
55°	776.4	804.9	876.2	945.0	978.3
57.5°	710.0	748.0	826.3	904.7	940.3
60°	648.2	683.8	778.8	864.3	899.9
62.5°	581.7	629.2	731.3	821.6	857.2
65°	512.9	565.1	681.5	771.7	807.3
67.5°	451.1	508.1	631.6	721.8	757.5
70°	377.5	448.8	577.0	667.2	702.8
72.5°	308.7	387.0	520.0	607.9	641.1
75°	242.2	330.0	460.6	539.0	555.6
77.5°	180.5	273.1	398.9	432.2	420.3
80°	128.2	218.5	311.1	294.4	301.6
82.5°	83.1	166.2	192.3	218.5	225.6
85°	47.5	97.4	118.7	128.2	133.0
87.5°	21.4	35.6	47.5	47.5	45.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)