

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: P263335

Luminaire Tested: **24CZ-LD5-40SE-SQP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263335  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-40SE-SQP-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2759.0 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

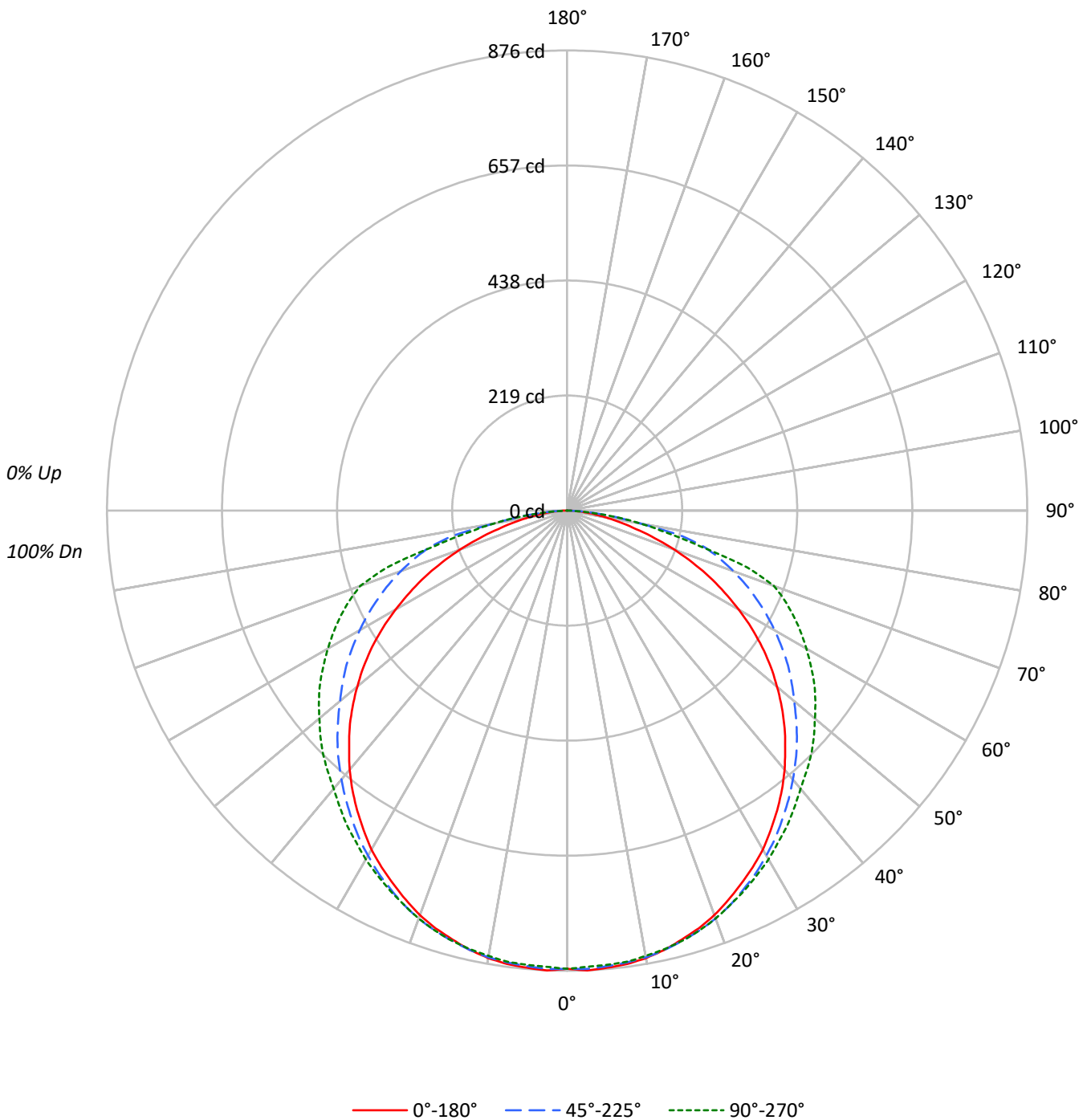
Input Watts (W): 31.155  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	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	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	1174	1174	1174
5°	1180	1176	1172
10°	1182	1180	1176
15°	1177	1181	1181
20°	1173	1184	1184
25°	1164	1181	1185
30°	1158	1178	1191
35°	1145	1175	1201
40°	1131	1174	1214
45°	1114	1177	1250
50°	1092	1181	1289
55°	1063	1203	1347
60°	1016	1227	1415
65°	953	1266	1515
70°	852	1323	1648
75°	704	1415	1363
80°	574	1093	1104
85°	462	726	682



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.8	3.0
10°-20°	239.0	8.7
20°-30°	365.3	13.2
30°-40°	446.8	16.2
40°-50°	478.1	17.3
50°-60°	457.8	16.6
60°-70°	387.2	14.0
70°-80°	245.5	8.9
80°-90°	56.5	2.0
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°	687.2	24.9
0°-40°	1134.0	41.1
0°-60°	2069.8	75.0
0°-90°	2759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2759.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	872	872	872	872	872	
5°	874	869	871	869	868	83
15°	845	844	848	848	848	239
25°	784	784	795	798	798	362
35°	697	701	715	725	731	436
45°	586	596	618	644	657	451
55°	453	467	513	556	574	404
65°	299	328	398	452	476	295
75°	135	191	272	271	262	147
85°	30	46	47	43	44	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	872.2	872.2	872.2	872.2	872.2
2.5°	876.4	872.2	873.6	872.2	869.3
5°	873.6	869.3	870.7	869.3	867.9
7.5°	870.7	866.5	867.9	866.5	866.5
10°	865.0	860.8	863.6	862.2	860.8
12.5°	856.5	853.6	856.5	855.1	855.1
15°	845.1	843.7	847.9	847.9	847.9
17.5°	833.7	832.3	838.0	838.0	838.0
20°	819.4	818.0	826.6	826.6	826.6
22.5°	802.3	800.9	812.3	812.3	812.3
25°	783.8	783.8	795.2	798.1	798.1
27.5°	765.3	765.3	778.1	782.4	782.4
30°	745.3	745.3	758.2	763.9	766.7
32.5°	721.1	724.0	738.2	745.3	748.2
35°	696.9	701.2	715.4	725.4	731.1
37.5°	671.2	675.5	692.6	704.0	711.1
40°	644.2	649.9	668.4	682.6	691.2
42.5°	614.2	622.8	644.2	662.7	674.1
45°	585.7	595.7	618.5	644.2	657.0
47.5°	554.4	565.8	591.4	624.2	637.0
50°	521.6	533.0	564.3	601.4	615.7
52.5°	488.8	501.6	538.7	578.6	595.7
55°	453.2	467.4	513.0	555.8	574.3
57.5°	416.1	433.2	484.5	530.1	550.1
60°	377.7	399.0	456.0	504.5	525.9
62.5°	337.8	363.4	427.5	478.8	501.6
65°	299.3	327.8	397.6	451.8	476.0
67.5°	257.9	293.6	367.7	426.1	448.9
70°	216.6	257.9	336.3	396.2	419.0
72.5°	175.3	225.2	305.0	359.1	359.1
75°	135.4	191.0	272.2	270.8	262.2
77.5°	102.6	159.6	223.7	191.0	192.4
80°	74.1	128.3	141.1	141.1	142.5
82.5°	49.9	98.3	91.2	89.8	92.6
85°	29.9	45.6	47.0	42.8	44.2
87.5°	14.3	15.7	12.8	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)