

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: P263388

Luminaire Tested: **24CZ-LD5-45-SQP-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263388  
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-LD5-45-SQP-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2690.0 lumens  
Efficiency: N/A  
Efficacy: 84.1 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

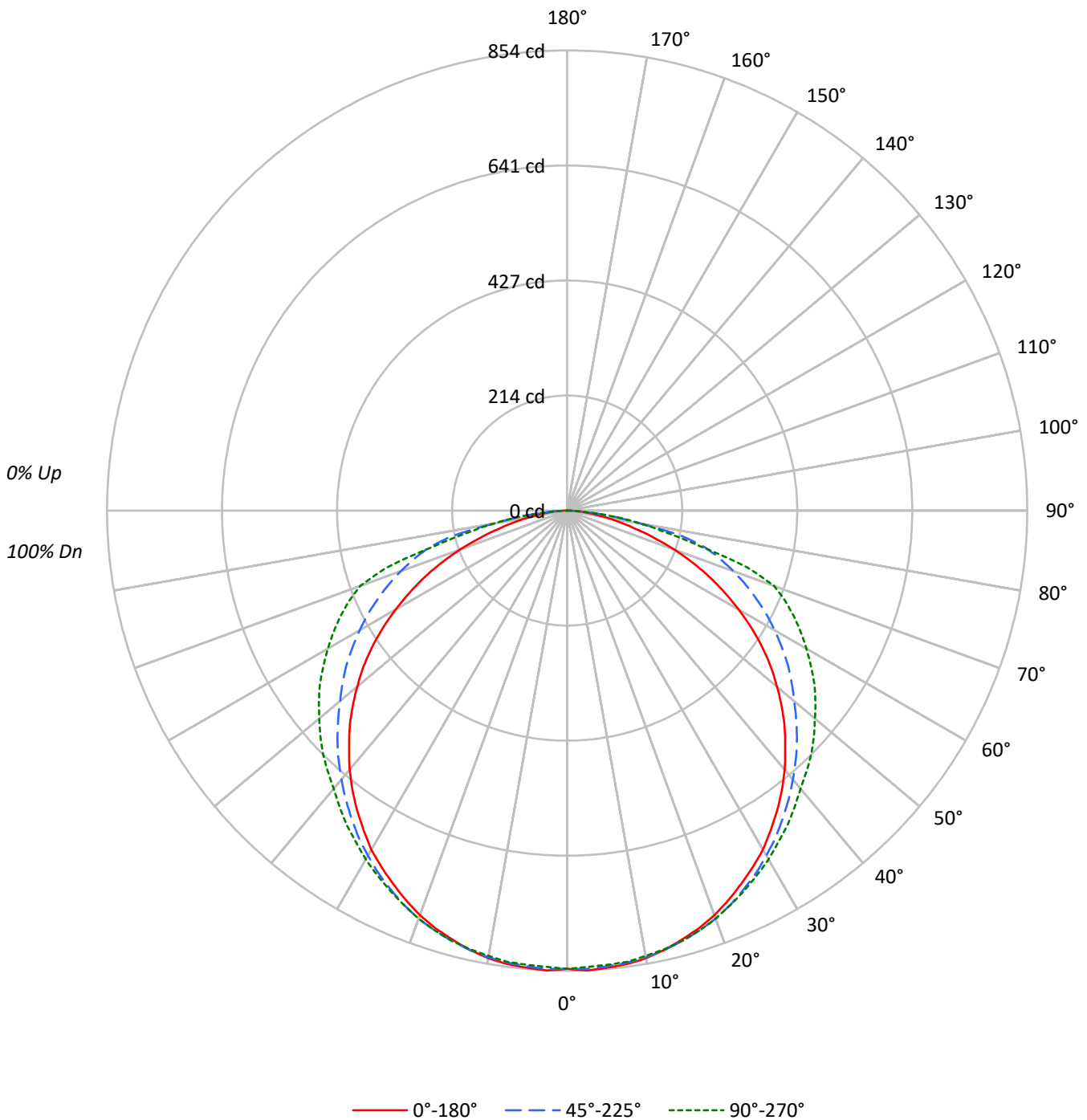
Input Watts (W): 31.992  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1144	1144	1144
5°	1150	1147	1143
10°	1152	1150	1147
15°	1148	1152	1152
20°	1144	1154	1154
25°	1135	1151	1155
30°	1129	1148	1161
35°	1116	1146	1171
40°	1103	1145	1184
45°	1087	1147	1219
50°	1064	1152	1257
55°	1037	1173	1314
60°	991	1196	1380
65°	929	1234	1478
70°	831	1290	1607
75°	686	1380	1329
80°	560	1066	1076
85°	451	709	665



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.8	3.0
10°-20°	233.0	8.7
20°-30°	356.2	13.2
30°-40°	435.6	16.2
40°-50°	466.1	17.3
50°-60°	446.3	16.6
60°-70°	377.6	14.0
70°-80°	239.3	8.9
80°-90°	55.1	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°	670.0	24.9
0°-40°	1105.6	41.1
0°-60°	2018.0	75.0
0°-90°	2690.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2690.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	850	850	850	850	850	
5°	852	848	849	848	846	81
15°	824	823	827	827	827	233
25°	764	764	775	778	778	353
35°	680	684	698	707	713	425
45°	571	581	603	628	640	440
55°	442	456	500	542	560	394
65°	292	320	388	440	464	287
75°	132	186	265	264	256	144
85°	29	44	46	42	43	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	850.4	850.4	850.4	850.4	850.4
2.5°	854.5	850.4	851.7	850.4	847.6
5°	851.7	847.6	849.0	847.6	846.2
7.5°	849.0	844.8	846.2	844.8	844.8
10°	843.4	839.2	842.0	840.6	839.2
12.5°	835.1	832.3	835.1	833.7	833.7
15°	824.0	822.6	826.7	826.7	826.7
17.5°	812.8	811.5	817.0	817.0	817.0
20°	798.9	797.6	805.9	805.9	805.9
22.5°	782.3	780.9	792.0	792.0	792.0
25°	764.2	764.2	775.3	778.1	778.1
27.5°	746.1	746.1	758.7	762.8	762.8
30°	726.7	726.7	739.2	744.8	747.5
32.5°	703.1	705.9	719.7	726.7	729.5
35°	679.5	683.6	697.5	707.2	712.8
37.5°	654.4	658.6	675.3	686.4	693.3
40°	628.0	633.6	651.7	665.6	673.9
42.5°	598.9	607.2	628.0	646.1	657.2
45°	571.1	580.8	603.0	628.0	640.5
47.5°	540.5	551.6	576.6	608.6	621.1
50°	508.5	519.7	550.2	586.4	600.3
52.5°	476.6	489.1	525.2	564.1	580.8
55°	441.9	455.7	500.2	541.9	560.0
57.5°	405.7	422.4	472.4	516.9	536.3
60°	368.2	389.1	444.6	491.9	512.7
62.5°	329.3	354.3	416.8	466.9	489.1
65°	291.8	319.6	387.7	440.5	464.1
67.5°	251.5	286.2	358.5	415.5	437.7
70°	211.2	251.5	327.9	386.3	408.5
72.5°	170.9	219.5	297.3	350.1	350.1
75°	132.0	186.2	265.4	264.0	255.7
77.5°	100.0	155.6	218.1	186.2	187.6
80°	72.3	125.1	137.6	137.6	138.9
82.5°	48.6	95.9	88.9	87.5	90.3
85°	29.2	44.5	45.9	41.7	43.1
87.5°	13.9	15.3	12.5	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)