

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: P263159

Luminaire Tested: **24CZ-LD5-40-SQP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263159
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-LD5-40-SQP-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2475.2 lumens
Efficiency: N/A
Efficacy: 85.3 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

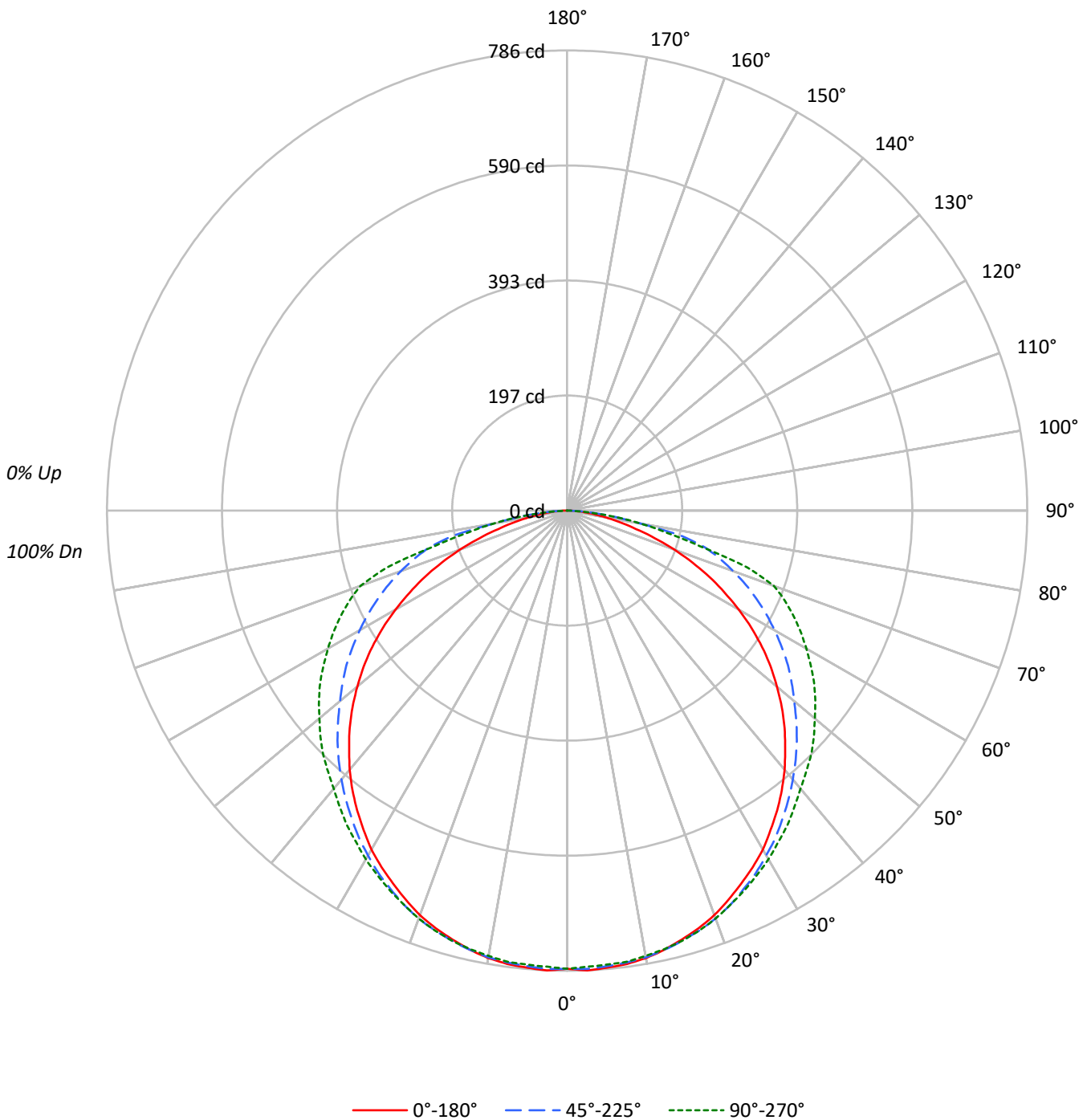
Input Watts (W): 29.007072
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1053	1053	1053
5°	1058	1055	1052
10°	1060	1059	1055
15°	1056	1060	1060
20°	1053	1062	1062
25°	1044	1059	1063
30°	1039	1057	1069
35°	1027	1054	1077
40°	1015	1053	1089
45°	1000	1056	1122
50°	979	1060	1156
55°	954	1080	1209
60°	912	1101	1270
65°	855	1136	1359
70°	764	1187	1479
75°	632	1269	1223
80°	515	981	991
85°	414	651	611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	3.0
10°-20°	214.4	8.7
20°-30°	327.7	13.2
30°-40°	400.8	16.2
40°-50°	428.9	17.3
50°-60°	410.7	16.6
60°-70°	347.4	14.0
70°-80°	220.2	8.9
80°-90°	50.7	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°	616.5	24.9
0°-40°	1017.3	41.1
0°-60°	1856.9	75.0
0°-90°	2475.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2475.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	784	780	781	780	779	75
15°	758	757	761	761	761	214
25°	703	703	713	716	716	324
35°	625	629	642	651	656	391
45°	526	534	555	578	589	405
55°	407	419	460	499	515	363
65°	268	294	357	405	427	264
75°	122	171	244	243	235	132
85°	27	41	42	38	40	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	782.5	782.5	782.5	782.5	782.5
2.5°	786.3	782.5	783.7	782.5	779.9
5°	783.7	779.9	781.2	779.9	778.6
7.5°	781.2	777.4	778.6	777.4	777.4
10°	776.1	772.2	774.8	773.5	772.2
12.5°	768.4	765.8	768.4	767.1	767.1
15°	758.2	756.9	760.7	760.7	760.7
17.5°	747.9	746.7	751.8	751.8	751.8
20°	735.2	733.9	741.6	741.6	741.6
22.5°	719.8	718.5	728.8	728.8	728.8
25°	703.2	703.2	713.4	716.0	716.0
27.5°	686.6	686.6	698.1	701.9	701.9
30°	668.7	668.7	680.2	685.3	687.9
32.5°	646.9	649.5	662.3	668.7	671.2
35°	625.2	629.0	641.8	650.8	655.9
37.5°	602.2	606.0	621.4	631.6	638.0
40°	577.9	583.0	599.6	612.4	620.1
42.5°	551.1	558.7	577.9	594.5	604.7
45°	525.5	534.4	554.9	577.9	589.4
47.5°	497.4	507.6	530.6	560.0	571.5
50°	467.9	478.2	506.3	539.5	552.3
52.5°	438.5	450.0	483.3	519.1	534.4
55°	406.6	419.4	460.3	498.6	515.3
57.5°	373.3	388.7	434.7	475.6	493.5
60°	338.8	358.0	409.1	452.6	471.8
62.5°	303.0	326.0	383.6	429.6	450.0
65°	268.5	294.1	356.7	405.3	427.0
67.5°	231.4	263.4	329.9	382.3	402.7
70°	194.3	231.4	301.7	355.4	375.9
72.5°	157.3	202.0	273.6	322.2	322.2
75°	121.5	171.3	244.2	242.9	235.3
77.5°	92.1	143.2	200.7	171.3	172.6
80°	66.5	115.1	126.6	126.6	127.9
82.5°	44.7	88.2	81.8	80.5	83.1
85°	26.8	40.9	42.2	38.4	39.6
87.5°	12.8	14.1	11.5	7.7	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)