

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: P263476

Luminaire Tested: **24CZ-LD5-45SE-SQP-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263476  
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-LD5-45SE-SQP-UNV-L92765-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2567.0 lumens  
Efficiency: N/A  
Efficacy: 73.2 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

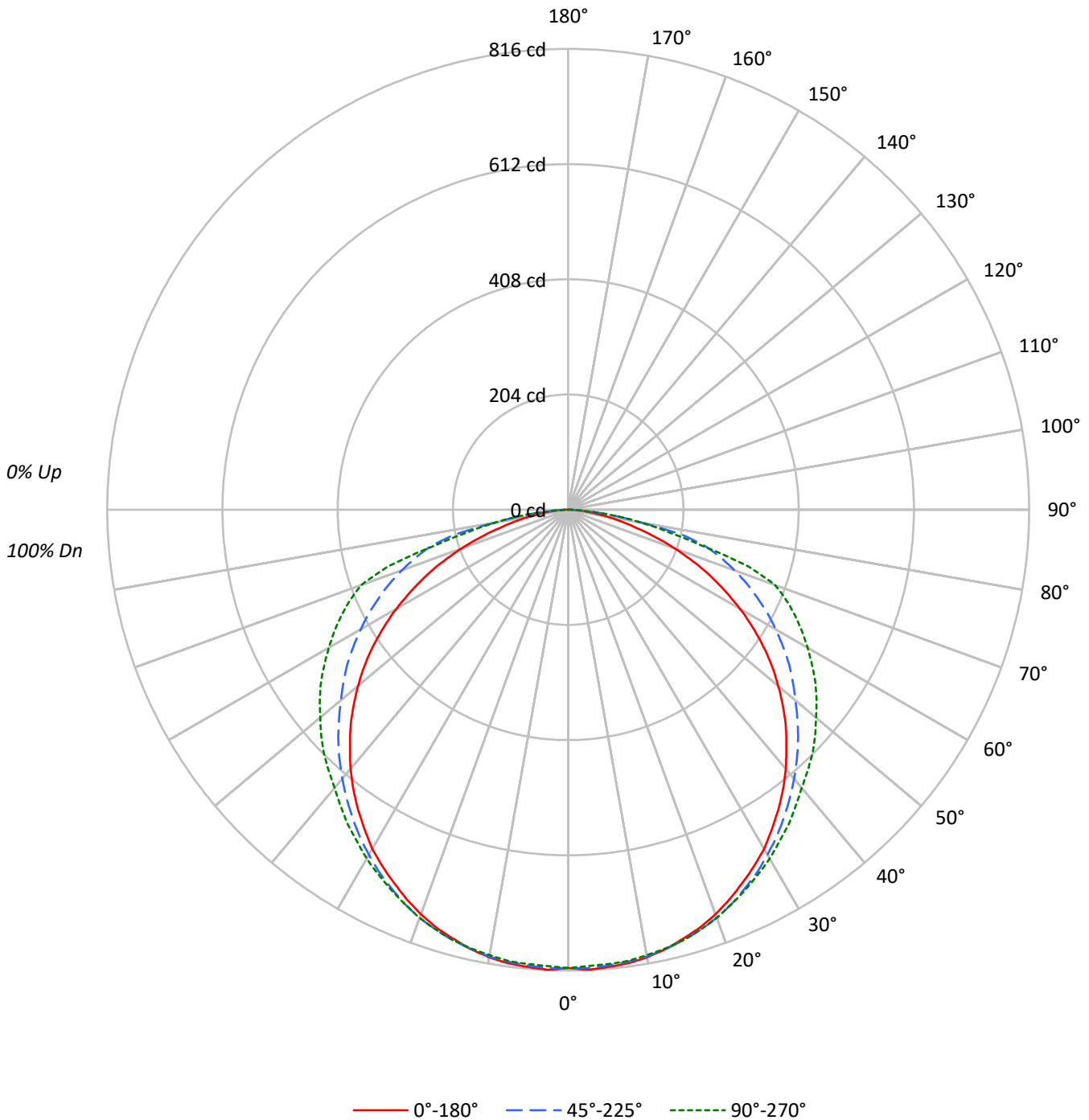
Input Watts (W): 35.061  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1092	1092	1092
5°	1098	1094	1091
10°	1100	1098	1094
15°	1095	1099	1099
20°	1092	1101	1101
25°	1083	1098	1102
30°	1077	1096	1108
35°	1065	1093	1117
40°	1053	1092	1130
45°	1037	1095	1163
50°	1016	1099	1199
55°	989	1120	1254
60°	946	1142	1317
65°	886	1178	1410
70°	793	1231	1533
75°	655	1317	1268
80°	534	1017	1027
85°	429	676	634



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.1	3.0
10°-20°	222.4	8.7
20°-30°	339.9	13.2
30°-40°	415.7	16.2
40°-50°	444.8	17.3
50°-60°	425.9	16.6
60°-70°	360.3	14.0
70°-80°	228.4	8.9
80°-90°	52.5	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°	639.3	24.9
0°-40°	1055.0	41.1
0°-60°	1925.8	75.0
0°-90°	2567.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2567.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	812	812	812	812	812	
5°	813	809	810	809	808	77
15°	786	785	789	789	789	222
25°	729	729	740	742	742	336
35°	648	652	666	675	680	406
45°	545	554	576	599	611	420
55°	422	435	477	517	534	376
65°	278	305	370	420	443	274
75°	126	178	253	252	244	137
85°	28	42	44	40	41	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	811.5	811.5	811.5	811.5	811.5
2.5°	815.5	811.5	812.8	811.5	808.8
5°	812.8	808.8	810.2	808.8	807.5
7.5°	810.2	806.2	807.5	806.2	806.2
10°	804.8	800.9	803.5	802.2	800.9
12.5°	796.9	794.2	796.9	795.6	795.6
15°	786.3	785.0	788.9	788.9	788.9
17.5°	775.7	774.4	779.7	779.7	779.7
20°	762.4	761.1	769.0	769.0	769.0
22.5°	746.5	745.2	755.8	755.8	755.8
25°	729.3	729.3	739.9	742.5	742.5
27.5°	712.0	712.0	724.0	727.9	727.9
30°	693.5	693.5	705.4	710.7	713.4
32.5°	670.9	673.6	686.8	693.5	696.1
35°	648.4	652.4	665.6	674.9	680.2
37.5°	624.5	628.5	644.4	655.0	661.6
40°	599.3	604.6	621.9	635.1	643.1
42.5°	571.5	579.4	599.3	616.6	627.2
45°	545.0	554.2	575.5	599.3	611.3
47.5°	515.8	526.4	550.3	580.8	592.7
50°	485.3	495.9	525.1	559.5	572.8
52.5°	454.8	466.7	501.2	538.3	554.2
55°	421.6	434.9	477.3	517.1	534.4
57.5°	387.2	403.1	450.8	493.3	511.8
60°	351.4	371.3	424.3	469.4	489.3
62.5°	314.2	338.1	397.8	445.5	466.7
65°	278.4	305.0	369.9	420.3	442.9
67.5°	240.0	273.1	342.1	396.5	417.7
70°	201.5	240.0	312.9	368.6	389.8
72.5°	163.1	209.5	283.8	334.1	334.1
75°	126.0	177.7	253.3	251.9	244.0
77.5°	95.5	148.5	208.2	177.7	179.0
80°	68.9	119.3	131.3	131.3	132.6
82.5°	46.4	91.5	84.9	83.5	86.2
85°	27.8	42.4	43.8	39.8	41.1
87.5°	13.3	14.6	11.9	8.0	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)