

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: P263391

Luminaire Tested: **24CZ-LD5-45-SQP-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263391  
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-5700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2799.0 lumens  
Efficiency: N/A  
Efficacy: 86.5 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

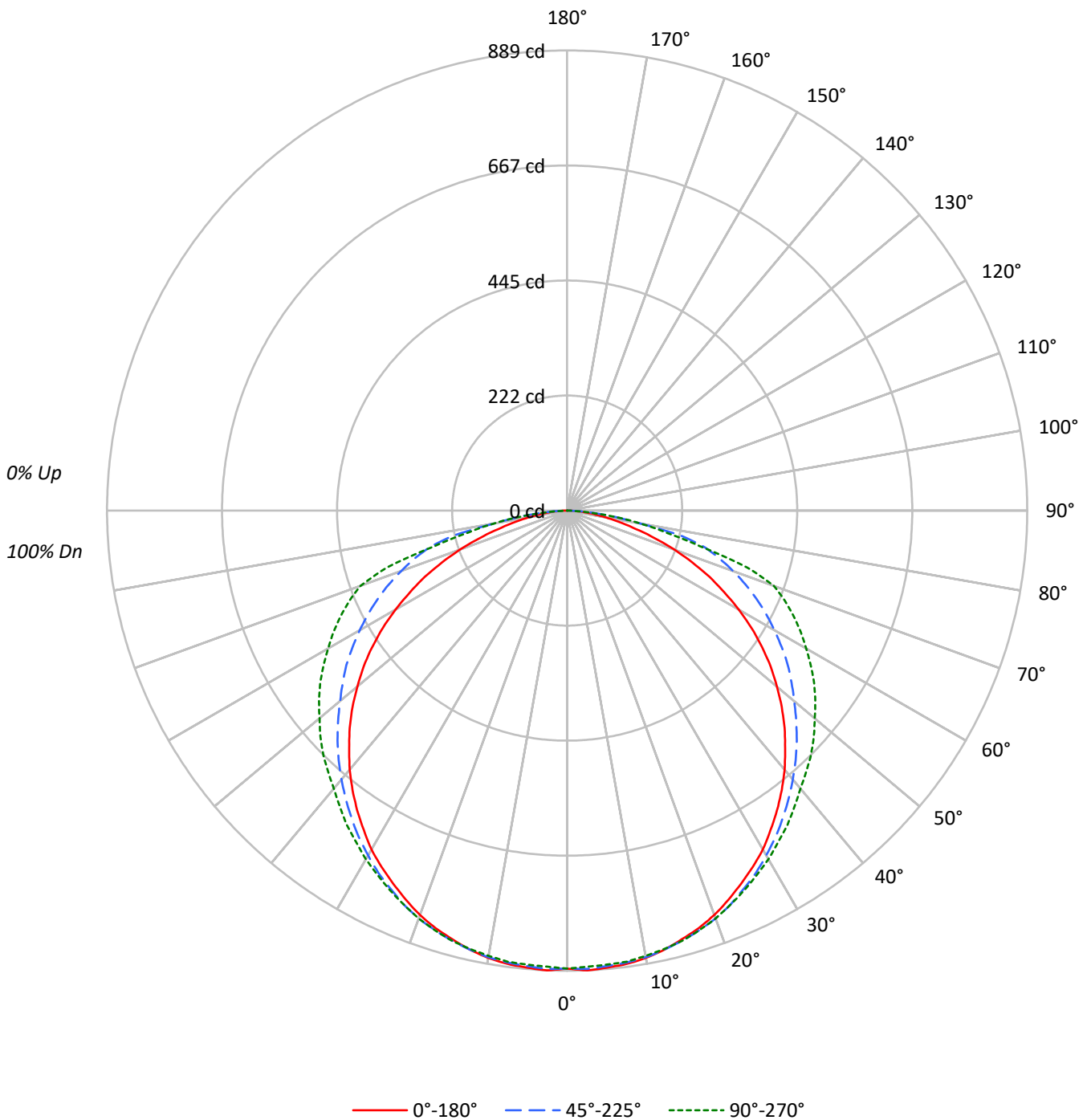
Input Watts (W): 32.364  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1190	1190	1190
5°	1197	1193	1189
10°	1199	1197	1193
15°	1194	1198	1198
20°	1190	1201	1201
25°	1181	1198	1202
30°	1175	1195	1208
35°	1161	1192	1218
40°	1148	1191	1232
45°	1131	1194	1268
50°	1108	1198	1307
55°	1079	1221	1367
60°	1031	1245	1436
65°	967	1284	1537
70°	865	1342	1672
75°	714	1435	1383
80°	583	1109	1120
85°	469	736	692



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.0	3.0
10°-20°	242.5	8.7
20°-30°	370.6	13.2
30°-40°	453.3	16.2
40°-50°	485.0	17.3
50°-60°	464.4	16.6
60°-70°	392.9	14.0
70°-80°	249.0	8.9
80°-90°	57.3	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°	697.1	24.9
0°-40°	1150.4	41.1
0°-60°	2099.8	75.0
0°-90°	2799.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2799.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	886	882	883	882	880	84
15°	857	856	860	860	860	242
25°	795	795	807	810	810	367
35°	707	711	726	736	742	442
45°	594	604	628	654	666	458
55°	460	474	520	564	583	410
65°	304	332	403	458	483	299
75°	137	194	276	275	266	149
85°	30	46	48	43	45	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	884.8	884.8	884.8	884.8	884.8
2.5°	889.2	884.8	886.3	884.8	881.9
5°	886.3	881.9	883.4	881.9	880.5
7.5°	883.4	879.0	880.5	879.0	879.0
10°	877.6	873.3	876.1	874.7	873.3
12.5°	868.9	866.0	868.9	867.5	867.5
15°	857.3	855.9	860.2	860.2	860.2
17.5°	845.8	844.3	850.1	850.1	850.1
20°	831.3	829.9	838.6	838.6	838.6
22.5°	814.0	812.5	824.1	824.1	824.1
25°	795.2	795.2	806.7	809.6	809.6
27.5°	776.4	776.4	789.4	793.7	793.7
30°	756.1	756.1	769.2	774.9	777.8
32.5°	731.6	734.5	748.9	756.1	759.0
35°	707.0	711.3	725.8	735.9	741.7
37.5°	681.0	685.3	702.6	714.2	721.4
40°	653.5	659.3	678.1	692.5	701.2
42.5°	623.1	631.8	653.5	672.3	683.9
45°	594.2	604.3	627.5	653.5	666.5
47.5°	562.4	574.0	600.0	633.3	646.3
50°	529.2	540.7	572.5	610.1	624.6
52.5°	495.9	508.9	546.5	587.0	604.3
55°	459.8	474.2	520.5	563.9	582.6
57.5°	422.2	439.5	491.6	537.8	558.1
60°	383.1	404.8	462.6	511.8	533.5
62.5°	342.6	368.7	433.7	485.8	508.9
65°	303.6	332.5	403.4	458.3	482.9
67.5°	261.7	297.8	373.0	432.3	455.4
70°	219.8	261.7	341.2	401.9	425.1
72.5°	177.8	228.4	309.4	364.3	364.3
75°	137.3	193.7	276.1	274.7	266.0
77.5°	104.1	161.9	227.0	193.7	195.2
80°	75.2	130.1	143.1	143.1	144.6
82.5°	50.6	99.8	92.5	91.1	94.0
85°	30.4	46.3	47.7	43.4	44.8
87.5°	14.5	15.9	13.0	8.7	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)