

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: P263252

Luminaire Tested: **24CZ-LD5-45-SQP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263252  
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-L82765-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2964.0 lumens  
Efficiency: N/A  
Efficacy: 93.2 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

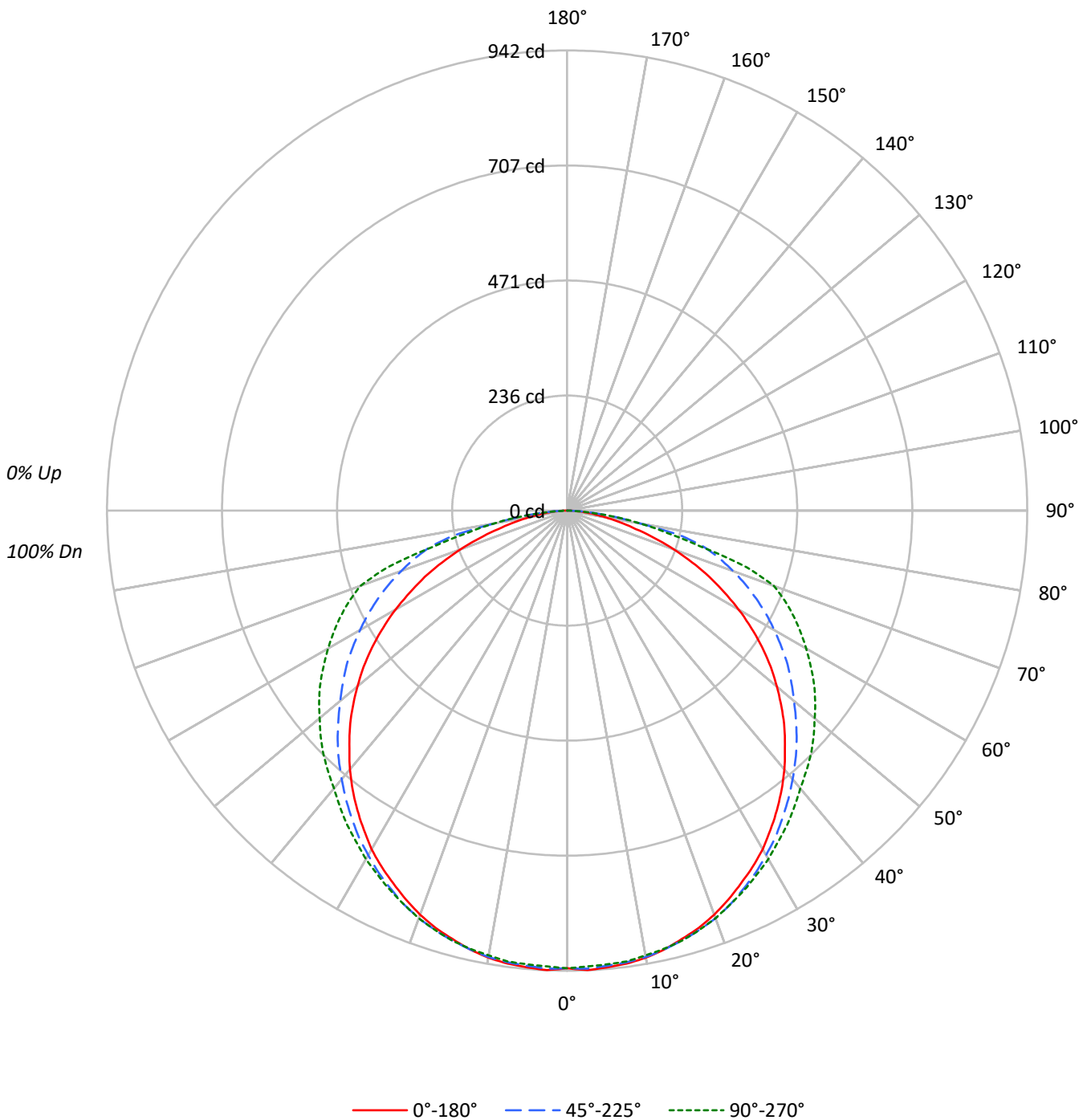
Input Watts (W): 31.806  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1261	1261	1261
5°	1268	1263	1259
10°	1270	1268	1263
15°	1265	1269	1269
20°	1260	1271	1271
25°	1250	1268	1273
30°	1244	1265	1280
35°	1230	1262	1290
40°	1215	1261	1304
45°	1197	1264	1343
50°	1173	1269	1384
55°	1142	1293	1447
60°	1092	1318	1520
65°	1024	1360	1628
70°	915	1421	1771
75°	756	1520	1464
80°	617	1175	1186
85°	497	780	733



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.0	3.0
10°-20°	256.8	8.7
20°-30°	392.5	13.2
30°-40°	480.0	16.2
40°-50°	513.6	17.3
50°-60°	491.8	16.6
60°-70°	416.0	14.0
70°-80°	263.7	8.9
80°-90°	60.7	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°	738.2	24.9
0°-40°	1218.2	41.1
0°-60°	2223.6	75.0
0°-90°	2964.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2964.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	937	937	937	937	937	
5°	938	934	935	934	932	89
15°	908	906	911	911	911	256
25°	842	842	854	857	857	389
35°	749	753	769	779	785	468
45°	629	640	664	692	706	485
55°	487	502	551	597	617	434
65°	322	352	427	485	511	317
75°	145	205	292	291	282	158
85°	32	49	50	46	48	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	937.0	937.0	937.0	937.0	937.0
2.5°	941.6	937.0	938.5	937.0	933.9
5°	938.5	933.9	935.4	933.9	932.4
7.5°	935.4	930.9	932.4	930.9	930.9
10°	929.3	924.7	927.8	926.3	924.7
12.5°	920.1	917.1	920.1	918.6	918.6
15°	907.9	906.4	910.9	910.9	910.9
17.5°	895.6	894.1	900.2	900.2	900.2
20°	880.3	878.8	888.0	888.0	888.0
22.5°	862.0	860.4	872.7	872.7	872.7
25°	842.1	842.1	854.3	857.4	857.4
27.5°	822.2	822.2	835.9	840.5	840.5
30°	800.7	800.7	814.5	820.6	823.7
32.5°	774.7	777.8	793.1	800.7	803.8
35°	748.7	753.3	768.6	779.3	785.4
37.5°	721.1	725.7	744.1	756.3	764.0
40°	692.0	698.1	718.0	733.4	742.5
42.5°	659.9	669.0	692.0	711.9	724.2
45°	629.2	640.0	664.5	692.0	705.8
47.5°	595.6	607.8	635.4	670.6	684.4
50°	560.3	572.6	606.3	646.1	661.4
52.5°	525.1	538.9	578.7	621.6	640.0
55°	486.9	502.2	551.2	597.1	617.0
57.5°	447.1	465.4	520.5	569.5	591.0
60°	405.7	428.7	489.9	542.0	564.9
62.5°	362.8	390.4	459.3	514.4	538.9
65°	321.5	352.1	427.2	485.3	511.4
67.5°	277.1	315.4	395.0	457.8	482.3
70°	232.7	277.1	361.3	425.6	450.1
72.5°	188.3	241.9	327.6	385.8	385.8
75°	145.4	205.2	292.4	290.9	281.7
77.5°	110.2	171.5	240.4	205.2	206.7
80°	79.6	137.8	151.6	151.6	153.1
82.5°	53.6	105.6	98.0	96.5	99.5
85°	32.2	49.0	50.5	45.9	47.5
87.5°	15.3	16.8	13.8	9.2	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)