

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: P263901

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263901  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-45SE-RDP-UNV-L92765-W2A1-U-5700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2969.0 lumens  
Efficiency: N/A  
Efficacy: 82.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

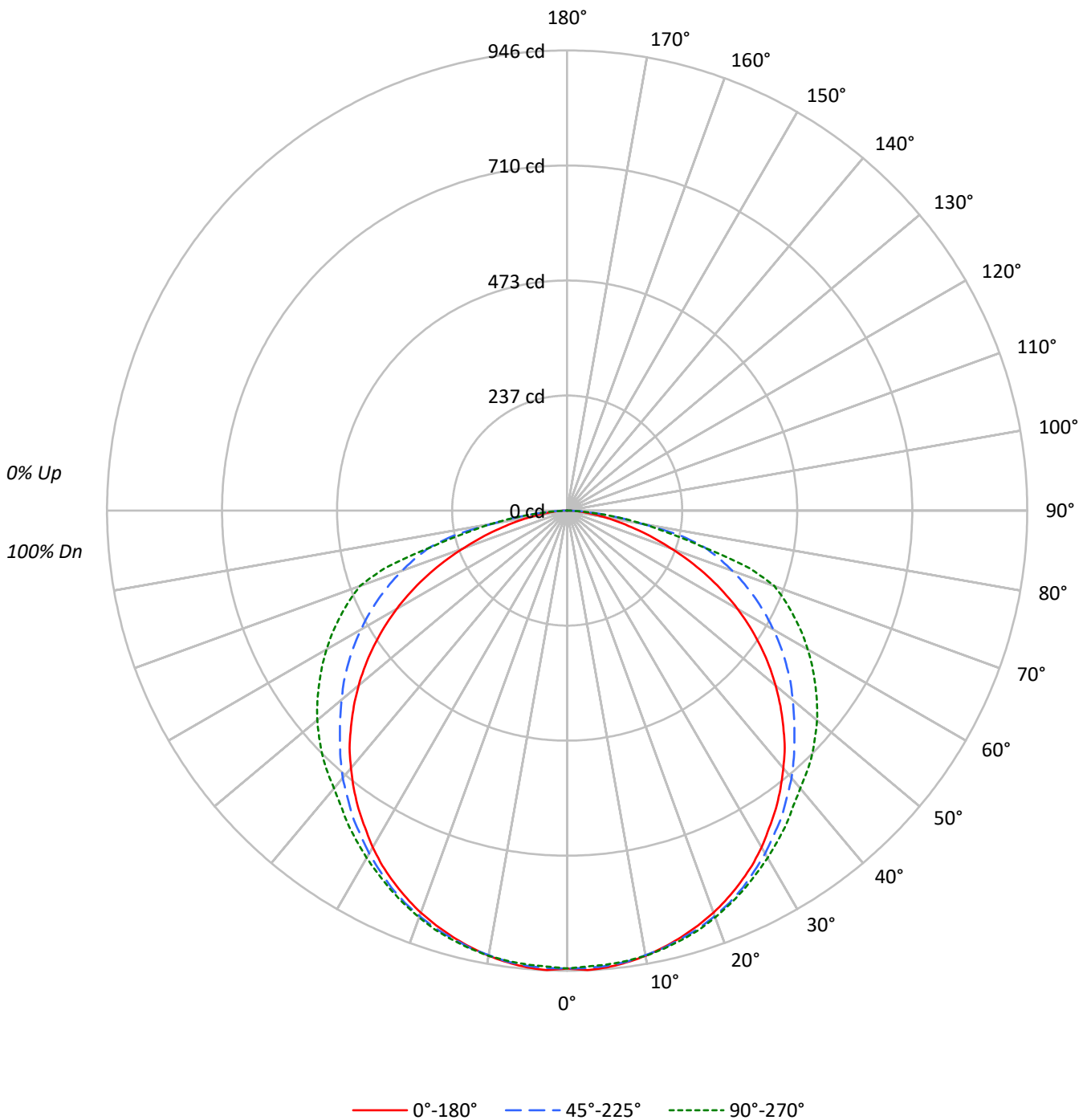
Input Watts (W): 35.991  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	62	58	56
4	81	68	59	52	78	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	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	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°	1266	1266	1266
5°	1273	1269	1265
10°	1270	1268	1270
15°	1264	1268	1272
20°	1260	1270	1274
25°	1252	1269	1276
30°	1242	1265	1281
35°	1229	1263	1292
40°	1214	1260	1309
45°	1196	1257	1354
50°	1172	1267	1404
55°	1138	1289	1460
60°	1089	1318	1538
65°	1014	1359	1638
70°	897	1420	1782
75°	752	1520	1497
80°	600	1200	1246
85°	474	812	744



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.3	3.0
10°-20°	256.9	8.7
20°-30°	392.4	13.2
30°-40°	479.8	16.2
40°-50°	513.5	17.3
50°-60°	492.6	16.6
60°-70°	415.9	14.0
70°-80°	265.8	9.0
80°-90°	62.9	2.1
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°	738.6	24.9
0°-40°	1218.4	41.0
0°-60°	2224.4	74.9
0°-90°	2969.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2969.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	941	941	941	941	941	
5°	943	937	940	938	937	90
15°	908	905	910	913	913	256
25°	843	842	855	858	859	389
35°	748	754	769	779	786	468
45°	628	639	661	691	712	485
55°	485	501	550	599	623	433
65°	319	349	427	487	514	314
75°	145	206	292	298	288	156
85°	31	51	53	51	48	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	941.2	941.2	941.2	941.2	941.2
2.5°	945.6	939.7	941.2	941.2	938.3
5°	942.7	936.8	939.7	938.3	936.8
7.5°	936.8	932.4	935.4	935.4	933.9
10°	929.5	925.1	928.0	929.5	929.5
12.5°	919.3	916.4	920.7	920.7	922.2
15°	907.6	904.7	910.5	913.4	913.4
17.5°	894.4	893.0	900.3	901.7	903.2
20°	879.8	878.4	887.1	887.1	890.0
22.5°	862.3	860.8	872.5	872.5	875.4
25°	843.3	841.8	855.0	857.9	859.4
27.5°	822.8	821.4	834.5	838.9	841.8
30°	799.4	799.4	814.0	819.9	824.3
32.5°	773.1	777.5	790.7	799.4	805.3
35°	748.3	754.1	768.7	779.0	786.3
37.5°	720.5	726.4	742.4	755.6	764.4
40°	691.3	698.6	717.6	732.2	745.4
42.5°	662.1	669.4	689.8	711.7	729.3
45°	628.4	638.7	660.6	691.3	711.7
47.5°	594.8	605.1	632.8	670.8	691.3
50°	559.7	571.4	605.1	648.9	670.8
52.5°	523.2	536.4	578.7	625.5	647.4
55°	485.2	501.3	549.5	599.2	622.6
57.5°	445.8	463.3	520.3	572.9	597.7
60°	404.8	426.8	489.6	545.1	571.4
62.5°	362.4	388.8	458.9	515.9	543.7
65°	318.6	349.3	426.8	486.7	514.4
67.5°	273.3	314.2	394.6	457.4	485.2
70°	228.0	276.2	361.0	425.3	453.1
72.5°	185.6	241.1	327.4	387.3	393.1
75°	144.7	206.1	292.3	298.1	287.9
77.5°	108.2	171.0	241.1	214.8	213.4
80°	77.5	137.4	154.9	159.3	160.8
82.5°	51.2	103.8	100.8	103.8	102.3
85°	30.7	51.2	52.6	51.2	48.2
87.5°	14.6	19.0	14.6	13.2	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)