

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: P263253

Luminaire Tested: **24CZ-LD5-45-SQP-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263253  
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-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3016.0 lumens  
Efficiency: N/A  
Efficacy: 94.3 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

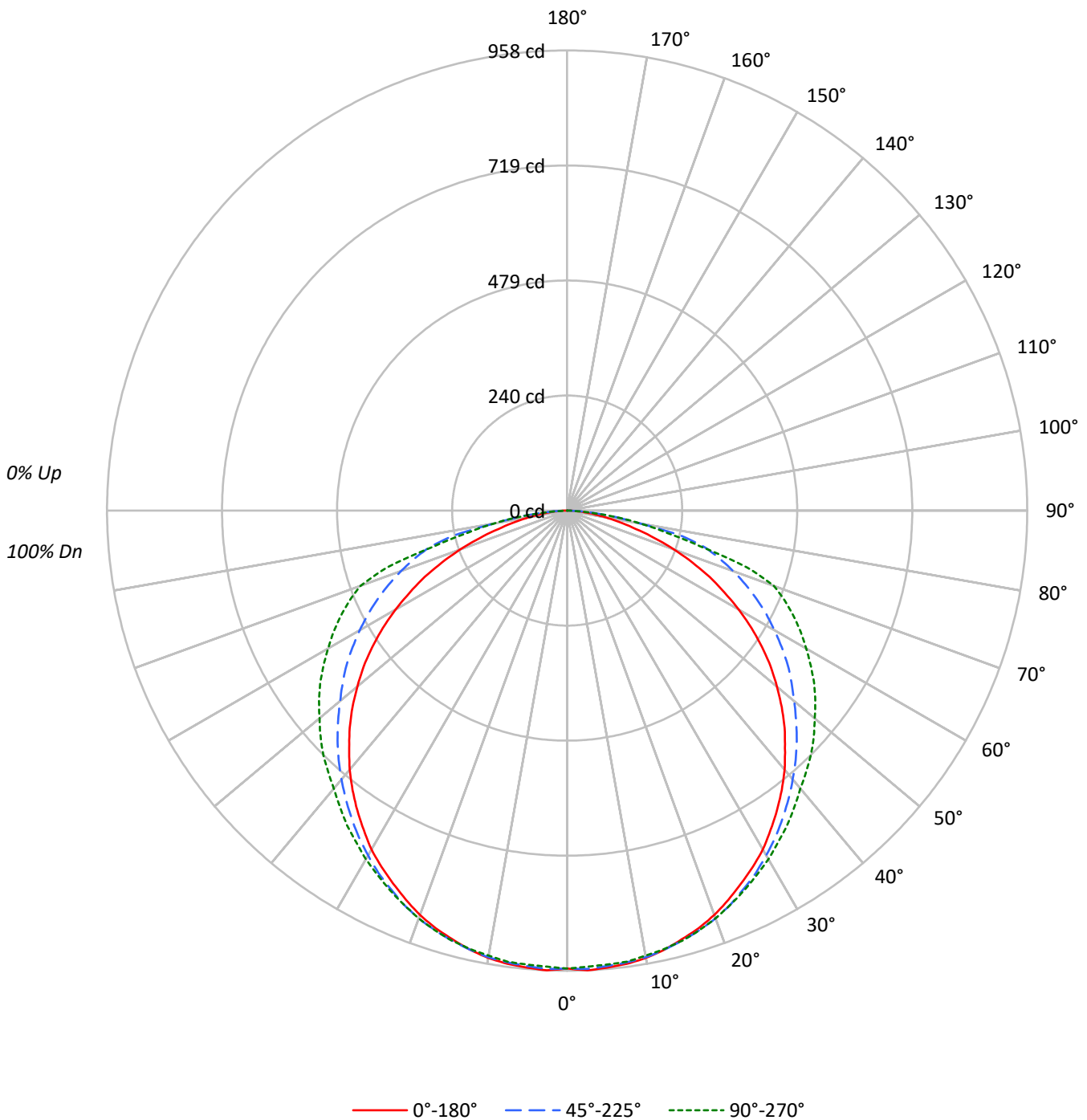
Input Watts (W): 31.992  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1283	1283	1283
5°	1290	1286	1281
10°	1292	1290	1286
15°	1287	1291	1291
20°	1283	1294	1294
25°	1272	1291	1295
30°	1266	1288	1302
35°	1251	1284	1313
40°	1237	1283	1327
45°	1218	1286	1367
50°	1194	1291	1409
55°	1162	1316	1473
60°	1111	1341	1547
65°	1042	1384	1656
70°	932	1447	1802
75°	769	1547	1490
80°	628	1195	1207
85°	505	794	746



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.5	3.0
10°-20°	261.3	8.7
20°-30°	399.3	13.2
30°-40°	488.4	16.2
40°-50°	522.6	17.3
50°-60°	500.4	16.6
60°-70°	423.3	14.0
70°-80°	268.3	8.9
80°-90°	61.7	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°	751.2	24.9
0°-40°	1239.6	41.1
0°-60°	2262.6	75.0
0°-90°	3016.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3016.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	953	953	953	953	953	
5°	955	950	952	950	949	91
15°	924	922	927	927	927	261
25°	857	857	869	872	872	395
35°	762	766	782	793	799	477
45°	640	651	676	704	718	493
55°	495	511	561	608	628	442
65°	327	358	435	494	520	322
75°	148	209	298	296	287	161
85°	33	50	51	47	48	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	953.4	953.4	953.4	953.4	953.4
2.5°	958.1	953.4	955.0	953.4	950.3
5°	955.0	950.3	951.9	950.3	948.7
7.5°	951.9	947.2	948.7	947.2	947.2
10°	945.6	941.0	944.1	942.5	941.0
12.5°	936.3	933.2	936.3	934.7	934.7
15°	923.8	922.3	926.9	926.9	926.9
17.5°	911.4	909.8	916.0	916.0	916.0
20°	895.8	894.2	903.6	903.6	903.6
22.5°	877.1	875.5	888.0	888.0	888.0
25°	856.8	856.8	869.3	872.4	872.4
27.5°	836.6	836.6	850.6	855.3	855.3
30°	814.8	814.8	828.8	835.0	838.1
32.5°	788.3	791.4	807.0	814.8	817.9
35°	761.8	766.5	782.0	793.0	799.2
37.5°	733.8	738.4	757.1	769.6	777.4
40°	704.2	710.4	730.6	746.2	755.6
42.5°	671.4	680.8	704.2	724.4	736.9
45°	640.3	651.2	676.1	704.2	718.2
47.5°	606.0	618.5	646.5	682.3	696.4
50°	570.2	582.6	616.9	657.4	673.0
52.5°	534.3	548.4	588.9	632.5	651.2
55°	495.4	511.0	560.8	607.6	627.8
57.5°	454.9	473.6	529.7	579.5	601.3
60°	412.8	436.2	498.5	551.5	574.9
62.5°	369.2	397.3	467.4	523.4	548.4
65°	327.2	358.3	434.6	493.8	520.3
67.5°	282.0	320.9	401.9	465.8	490.7
70°	236.8	282.0	367.7	433.1	458.0
72.5°	191.6	246.1	333.4	392.6	392.6
75°	148.0	208.8	297.6	296.0	286.6
77.5°	112.2	174.5	244.6	208.8	210.3
80°	81.0	140.2	154.2	154.2	155.8
82.5°	54.5	107.5	99.7	98.1	101.3
85°	32.7	49.9	51.4	46.7	48.3
87.5°	15.6	17.1	14.0	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)