

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: P263344

Luminaire Tested: **24CZ-LD5-45SE-SQP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263344  
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-L82765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3089.0 lumens  
Efficiency: N/A  
Efficacy: 86.3 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

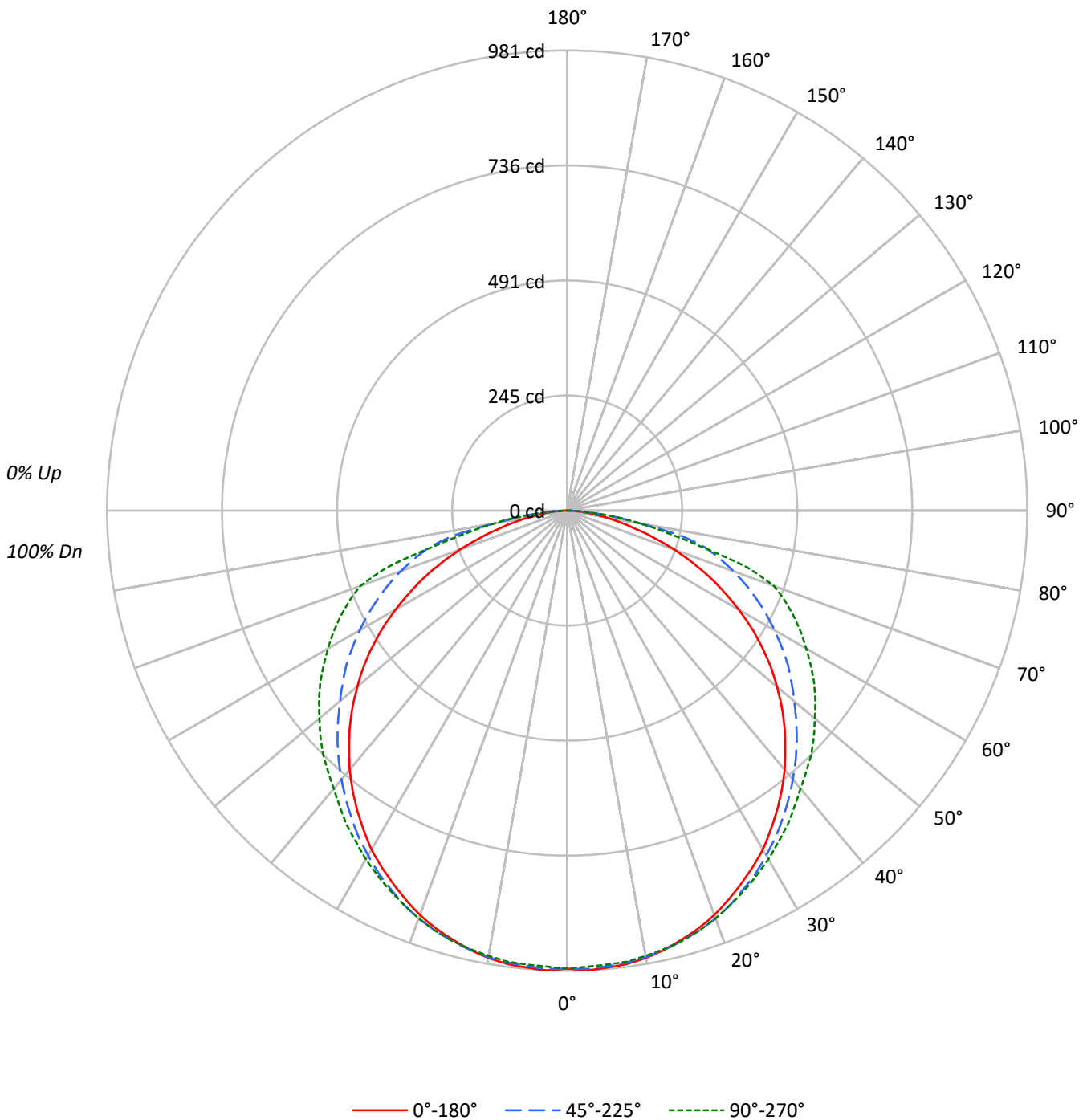
Input Watts (W): 35.805  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263344

CATALOG NUMBER: 24CZ-LD5-45SE-SQP-UNV-L82765-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P263344

CATALOG NUMBER: 24CZ-LD5-45SE-SQP-UNV-L82765-W2A1-U-5000K

**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	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					100			
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56					56			
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47					47			
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41					41			
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35					35			
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28					28			
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25					25			
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22					22			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1314	1314	1314
5°	1321	1317	1312
10°	1323	1321	1317
15°	1318	1322	1322
20°	1314	1325	1325
25°	1303	1322	1326
30°	1297	1319	1334
35°	1282	1316	1344
40°	1267	1314	1359
45°	1248	1318	1400
50°	1222	1322	1443
55°	1190	1347	1508
60°	1138	1374	1584
65°	1067	1417	1697
70°	954	1482	1845
75°	788	1585	1526
80°	643	1224	1237
85°	517	814	764



TEST NUMBER: P263344

CATALOG NUMBER: 24CZ-LD5-45SE-SQP-UNV-L82765-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.7	3.0
10°-20°	267.6	8.7
20°-30°	409.0	13.2
30°-40°	500.2	16.2
40°-50°	535.2	17.3
50°-60°	512.5	16.6
60°-70°	433.6	14.0
70°-80°	274.9	8.9
80°-90°	63.2	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°	769.4	24.9
0°-40°	1269.6	41.1
0°-60°	2317.4	75.0
0°-90°	3089.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3089.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	976	976	976	976	976	
5°	978	973	975	973	972	93
15°	946	945	949	949	949	267
25°	878	878	890	894	894	405
35°	780	785	801	812	818	488
45°	656	667	692	721	736	505
55°	507	523	574	622	643	453
65°	335	367	445	506	533	330
75°	152	214	305	303	294	165
85°	34	51	53	48	50	40
90°	0	0	0	0	0	



TEST NUMBER: P263344

CATALOG NUMBER: 24CZ-LD5-45SE-SQP-UNV-L82765-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	976.5	976.5	976.5	976.5	976.5
2.5°	981.3	976.5	978.1	976.5	973.3
5°	978.1	973.3	974.9	973.3	971.7
7.5°	974.9	970.1	971.7	970.1	970.1
10°	968.5	963.7	966.9	965.3	963.7
12.5°	958.9	955.7	958.9	957.3	957.3
15°	946.2	944.6	949.4	949.4	949.4
17.5°	933.4	931.8	938.2	938.2	938.2
20°	917.5	915.9	925.4	925.4	925.4
22.5°	898.3	896.7	909.5	909.5	909.5
25°	877.6	877.6	890.3	893.5	893.5
27.5°	856.8	856.8	871.2	876.0	876.0
30°	834.5	834.5	848.8	855.2	858.4
32.5°	807.4	810.6	826.5	834.5	837.7
35°	780.2	785.0	801.0	812.1	818.5
37.5°	751.5	756.3	775.4	788.2	796.2
40°	721.2	727.6	748.3	764.3	773.9
42.5°	687.7	697.3	721.2	741.9	754.7
45°	655.8	666.9	692.5	721.2	735.6
47.5°	620.7	633.4	662.2	698.9	713.2
50°	584.0	596.7	631.8	673.3	689.3
52.5°	547.3	561.6	603.1	647.8	666.9
55°	507.4	523.3	574.4	622.3	643.0
57.5°	465.9	485.1	542.5	593.6	615.9
60°	422.8	446.8	510.6	564.8	588.8
62.5°	378.2	406.9	478.7	536.1	561.6
65°	335.1	367.0	445.2	505.8	532.9
67.5°	288.8	328.7	411.7	477.1	502.6
70°	242.5	288.8	376.6	443.6	469.1
72.5°	196.3	252.1	341.5	402.1	402.1
75°	151.6	213.8	304.8	303.2	293.6
77.5°	114.9	178.7	250.5	213.8	215.4
80°	83.0	143.6	158.0	158.0	159.6
82.5°	55.8	110.1	102.1	100.5	103.7
85°	33.5	51.1	52.7	47.9	49.5
87.5°	16.0	17.6	14.4	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)