

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: P263256

Luminaire Tested: **24CZ-LD5-45-SQP-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263256  
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-5700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3096.0 lumens  
Efficiency: N/A  
Efficacy: 95.9 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

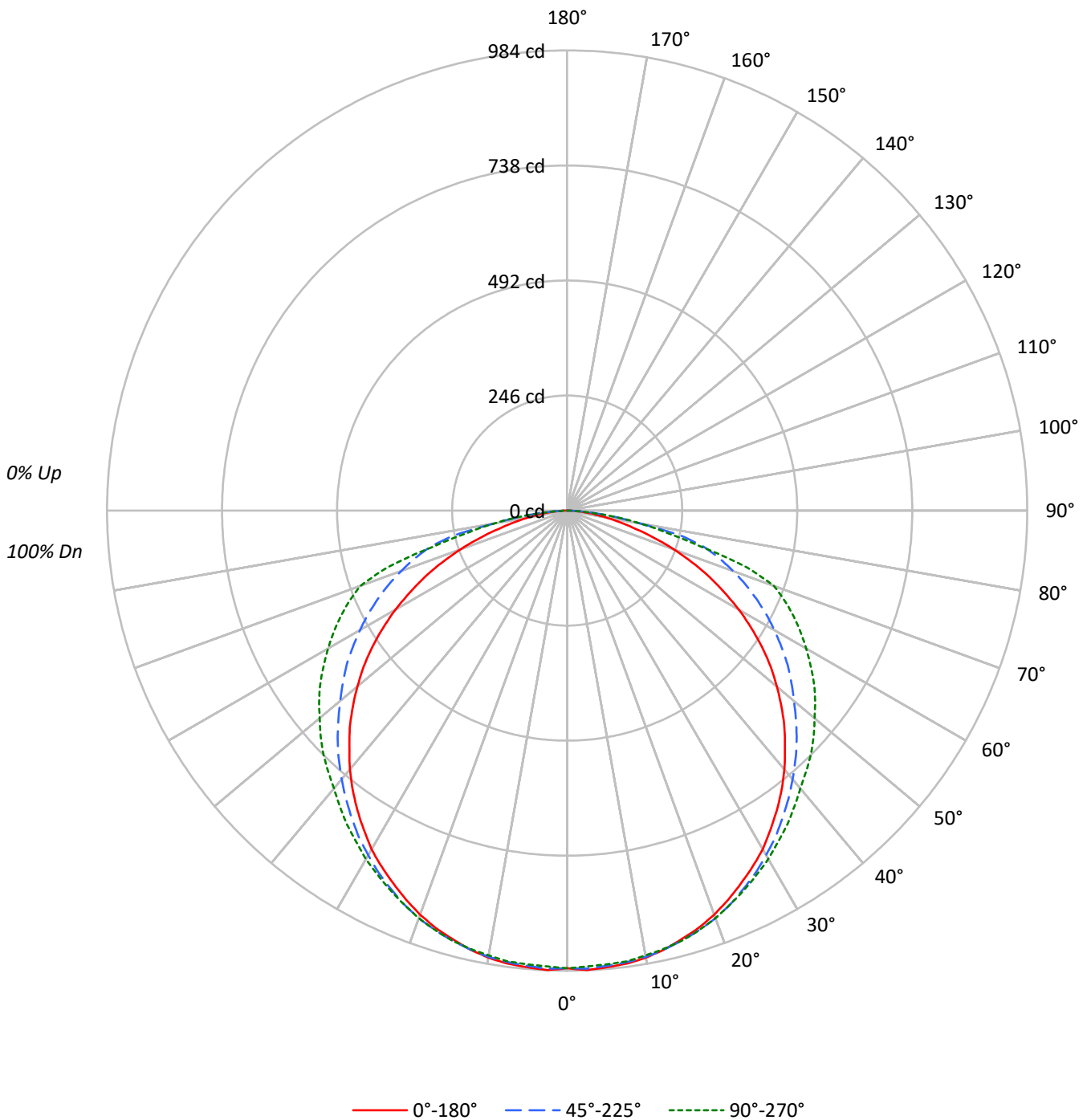
Input Watts (W): 32.271  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263256

CATALOG NUMBER: 24CZ-LD5-45-SQP-UNV-L82765-W2A1-U-5700K

### Luminous Intensity Polar Plot





TEST NUMBER: P263256

CATALOG NUMBER: 24CZ-LD5-45-SQP-UNV-L82765-W2A1-U-5700K

**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°	1317	1317	1317
5°	1324	1320	1315
10°	1326	1324	1320
15°	1321	1325	1325
20°	1317	1328	1328
25°	1306	1325	1329
30°	1299	1322	1337
35°	1284	1319	1348
40°	1270	1317	1362
45°	1251	1321	1403
50°	1225	1326	1446
55°	1193	1350	1512
60°	1140	1377	1588
65°	1069	1421	1700
70°	956	1485	1850
75°	790	1588	1530
80°	645	1227	1239
85°	519	815	766



TEST NUMBER: P263256

CATALOG NUMBER: 24CZ-LD5-45-SQP-UNV-L82765-W2A1-U-5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.9	3.0
10°-20°	268.2	8.7
20°-30°	409.9	13.2
30°-40°	501.4	16.2
40°-50°	536.5	17.3
50°-60°	513.7	16.6
60°-70°	434.6	14.0
70°-80°	275.5	8.9
80°-90°	63.4	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°	771.1	24.9
0°-40°	1272.5	41.1
0°-60°	2322.6	75.0
0°-90°	3096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3096.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	979	979	979	979	979	
5°	980	976	977	976	974	93
15°	948	947	952	952	952	268
25°	880	880	892	896	896	406
35°	782	787	803	814	820	489
45°	657	668	694	723	737	506
55°	508	524	576	624	644	454
65°	336	368	446	507	534	331
75°	152	214	305	304	294	165
85°	34	51	53	48	50	40
90°	0	0	0	0	0	



TEST NUMBER: P263256

CATALOG NUMBER: 24CZ-LD5-45-SQP-UNV-L82765-W2A1-U-5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	978.7	978.7	978.7	978.7	978.7
2.5°	983.5	978.7	980.3	978.7	975.5
5°	980.3	975.5	977.1	975.5	973.9
7.5°	977.1	972.3	973.9	972.3	972.3
10°	970.7	965.9	969.1	967.5	965.9
12.5°	961.1	957.9	961.1	959.5	959.5
15°	948.3	946.7	951.5	951.5	951.5
17.5°	935.5	933.9	940.3	940.3	940.3
20°	919.5	917.9	927.5	927.5	927.5
22.5°	900.3	898.7	911.5	911.5	911.5
25°	879.6	879.6	892.3	895.5	895.5
27.5°	858.8	858.8	873.2	878.0	878.0
30°	836.4	836.4	850.8	857.2	860.4
32.5°	809.2	812.4	828.4	836.4	839.6
35°	782.0	786.8	802.8	814.0	820.4
37.5°	753.2	758.0	777.2	790.0	798.0
40°	722.8	729.2	750.0	766.0	775.6
42.5°	689.3	698.8	722.8	743.6	756.4
45°	657.3	668.5	694.0	722.8	737.2
47.5°	622.1	634.9	663.7	700.4	714.8
50°	585.3	598.1	633.3	674.9	690.8
52.5°	548.5	562.9	604.5	649.3	668.5
55°	508.5	524.5	575.7	623.7	644.5
57.5°	467.0	486.2	543.7	594.9	617.3
60°	423.8	447.8	511.7	566.1	590.1
62.5°	379.0	407.8	479.8	537.3	562.9
65°	335.8	367.8	446.2	506.9	534.1
67.5°	289.5	329.4	412.6	478.2	503.7
70°	243.1	289.5	377.4	444.6	470.2
72.5°	196.7	252.7	342.2	403.0	403.0
75°	151.9	214.3	305.4	303.8	294.3
77.5°	115.1	179.1	251.1	214.3	215.9
80°	83.2	143.9	158.3	158.3	159.9
82.5°	56.0	110.3	102.3	100.7	103.9
85°	33.6	51.2	52.8	48.0	49.6
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)