

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: P259221

Luminaire Tested: **22CZ-LD5-29-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-29-UNV-L83050-W2A1-U-4500K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3021.0 lumens
Efficiency: N/A
Efficacy: 138.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

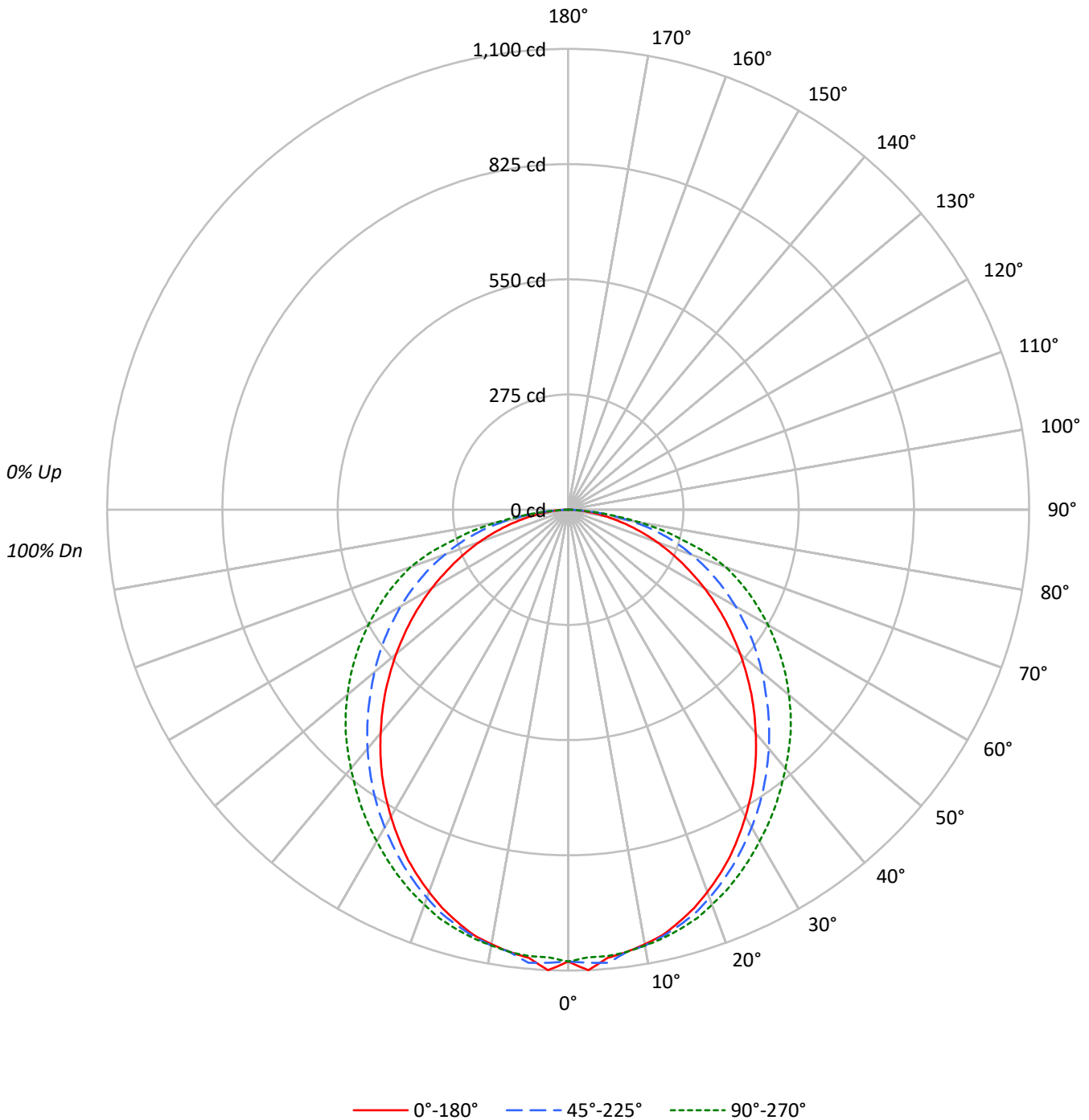
Input Watts (W): 21.855
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P259221

CATALOG NUMBER: 22CZ-LD5-29-UNV-L83050-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P259221

CATALOG NUMBER: 22CZ-LD5-29-UNV-L83050-W2A1-U-4500K

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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2902	2902	2902
5°	2901	2932	2889
10°	2878	2886	2886
15°	2840	2861	2885
20°	2781	2823	2873
25°	2713	2774	2857
30°	2629	2721	2839
35°	2543	2669	2833
40°	2446	2616	2833
45°	2348	2566	2857
50°	2245	2528	2878
55°	2137	2502	2915
60°	2024	2483	2965
65°	1899	2469	3040
70°	1769	2462	3144
75°	1604	2459	2979
80°	1389	2276	2641
85°	1179	1723	1680



TEST NUMBER: P259221

CATALOG NUMBER: 22CZ-LD5-29-UNV-L83050-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.3	3.4
10°-20°	289.7	9.6
20°-30°	430.9	14.3
30°-40°	509.7	16.9
40°-50°	523.9	17.3
50°-60°	478.7	15.8
60°-70°	382.9	12.7
70°-80°	240.3	8.0
80°-90°	62.6	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°	822.9	27.2
0°-40°	1332.6	44.1
0°-60°	2335.2	77.3
0°-90°	3021.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3021.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1078	1078	1078	1078	1078	
5°	1074	1074	1086	1078	1070	102
15°	1020	1021	1027	1033	1036	287
25°	914	920	934	950	962	420
35°	774	784	812	843	862	484
45°	617	633	674	724	751	476
55°	455	477	533	592	621	407
65°	298	325	388	447	477	296
75°	154	184	236	272	286	164
85°	38	48	56	54	54	44
90°	0	0	0	0	0	



TEST NUMBER: P259221

CATALOG NUMBER: 22CZ-LD5-29-UNV-L83050-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1078.3	1078.3	1078.3	1078.3	1078.3
2.5°	1100.3	1095.9	1082.7	1073.9	1069.5
5°	1073.9	1073.9	1085.6	1078.3	1069.5
7.5°	1065.1	1065.1	1065.1	1087.1	1065.1
10°	1053.3	1054.8	1056.3	1065.1	1056.3
12.5°	1040.1	1040.1	1043.0	1046.0	1047.4
15°	1019.5	1021.0	1026.9	1032.8	1035.7
17.5°	997.5	1001.9	1009.3	1016.6	1022.5
20°	971.1	976.9	985.7	997.5	1003.4
22.5°	943.1	949.0	960.8	974.0	984.3
25°	913.8	919.6	934.3	950.5	962.2
27.5°	880.0	887.3	904.9	927.0	938.7
30°	846.2	855.0	875.6	900.5	913.8
32.5°	810.9	821.2	844.7	872.6	888.8
35°	774.2	784.5	812.4	843.2	862.3
37.5°	736.0	747.8	778.6	813.9	834.4
40°	696.3	709.6	744.8	783.0	806.5
42.5°	656.7	671.4	709.6	755.1	778.6
45°	617.0	633.2	674.3	724.3	750.7
47.5°	575.9	595.0	637.6	693.4	719.8
50°	536.2	555.3	603.8	661.1	687.5
52.5°	495.1	517.1	568.5	627.3	655.2
55°	455.4	477.4	533.3	592.0	621.4
57.5°	415.7	437.8	496.5	556.8	586.2
60°	376.1	399.6	461.3	520.1	550.9
62.5°	336.4	361.4	424.6	484.8	514.2
65°	298.2	324.7	387.8	446.6	477.4
67.5°	261.5	289.4	351.1	408.4	439.3
70°	224.8	252.7	312.9	368.7	399.6
72.5°	189.5	217.4	276.2	326.1	349.6
75°	154.3	183.6	236.5	271.8	286.5
77.5°	120.5	149.8	195.4	218.9	235.1
80°	89.6	114.6	146.9	164.5	170.4
82.5°	61.7	82.3	102.8	107.2	110.2
85°	38.2	48.5	55.8	54.4	54.4
87.5°	17.6	19.1	16.2	11.8	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)