

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: P259228

Luminaire Tested: **22CZ-LD5-39-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259228
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-LD5-39-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3721.0 lumens
Efficiency: N/A
Efficacy: 123.9 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

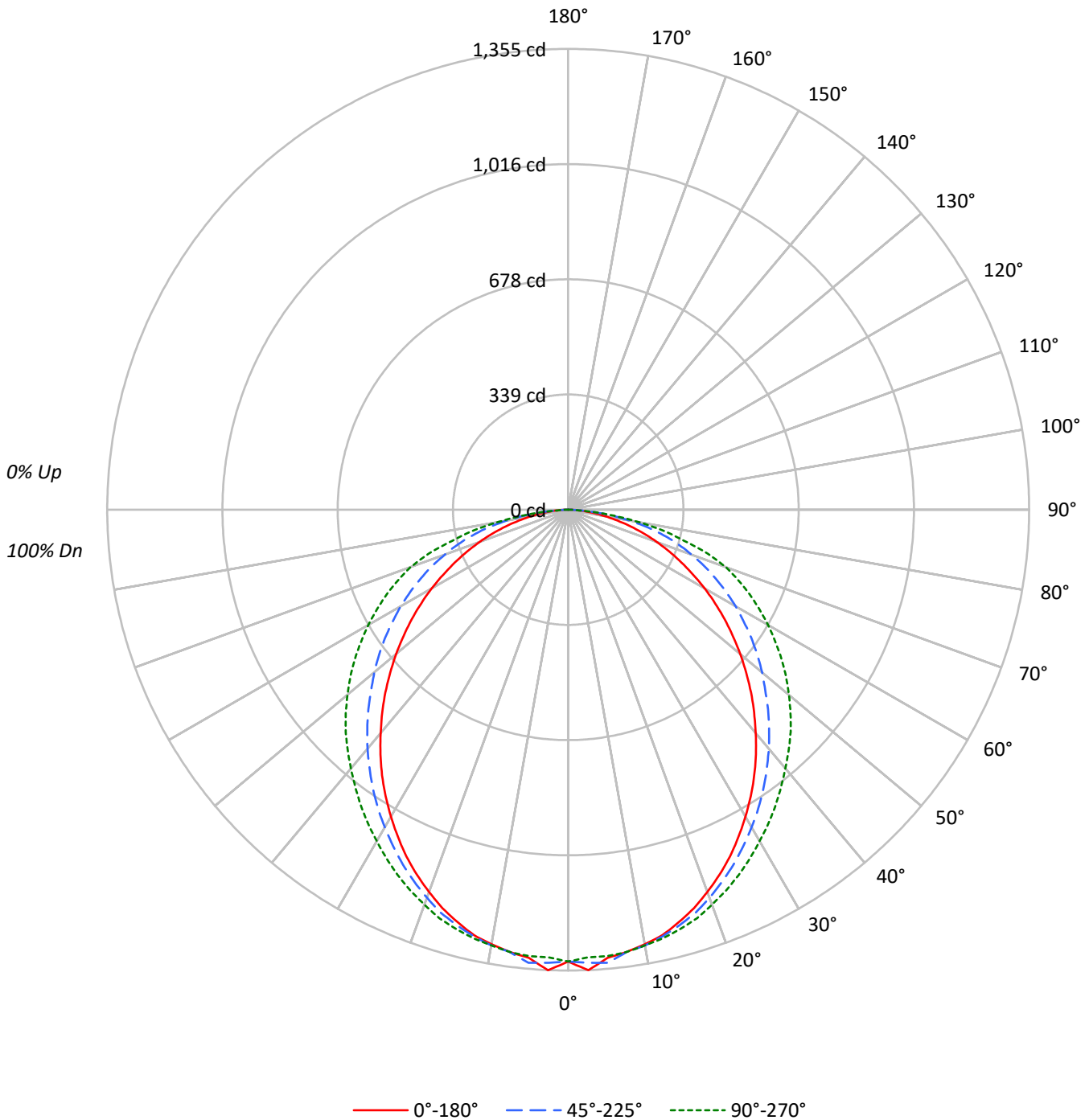
Input Watts (W): 30.039
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3574	3574	3574
5°	3573	3612	3558
10°	3545	3555	3555
15°	3499	3524	3554
20°	3425	3477	3539
25°	3342	3417	3519
30°	3239	3351	3497
35°	3133	3287	3489
40°	3013	3223	3490
45°	2892	3161	3519
50°	2765	3113	3545
55°	2632	3081	3591
60°	2493	3058	3652
65°	2339	3042	3745
70°	2178	3032	3873
75°	1975	3029	3668
80°	1711	2803	3253
85°	1451	2124	2069



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.0	3.4
10°-20°	356.8	9.6
20°-30°	530.8	14.3
30°-40°	627.8	16.9
40°-50°	645.3	17.3
50°-60°	589.6	15.8
60°-70°	471.7	12.7
70°-80°	296.0	8.0
80°-90°	77.1	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°	1013.6	27.2
0°-40°	1641.4	44.1
0°-60°	2876.2	77.3
0°-90°	3721.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3721.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1328	1328	1328	1328	1328	
5°	1323	1323	1337	1328	1317	126
15°	1256	1258	1265	1272	1276	354
25°	1126	1133	1151	1171	1185	518
35°	954	966	1001	1039	1062	596
45°	760	780	830	892	925	586
55°	561	588	657	729	765	502
65°	367	400	478	550	588	365
75°	190	226	291	335	353	202
85°	47	60	69	67	67	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1328.2	1328.2	1328.2	1328.2	1328.2
2.5°	1355.3	1349.9	1333.6	1322.7	1317.3
5°	1322.7	1322.7	1337.2	1328.2	1317.3
7.5°	1311.9	1311.9	1311.9	1339.0	1311.9
10°	1297.4	1299.2	1301.0	1311.9	1301.0
12.5°	1281.1	1281.1	1284.7	1288.3	1290.2
15°	1255.8	1257.6	1264.8	1272.1	1275.7
17.5°	1228.6	1234.1	1243.1	1252.2	1259.4
20°	1196.1	1203.3	1214.2	1228.6	1235.9
22.5°	1161.7	1168.9	1183.4	1199.7	1212.3
25°	1125.5	1132.7	1150.8	1170.7	1185.2
27.5°	1083.9	1092.9	1114.6	1141.8	1156.3
30°	1042.3	1053.1	1078.4	1109.2	1125.5
32.5°	998.8	1011.5	1040.4	1074.8	1094.7
35°	953.6	966.3	1000.6	1038.6	1062.2
37.5°	906.5	921.0	959.0	1002.4	1027.8
40°	857.7	874.0	917.4	964.4	993.4
42.5°	808.8	826.9	874.0	930.1	959.0
45°	760.0	779.9	830.5	892.1	924.6
47.5°	709.3	732.8	785.3	854.1	886.6
50°	660.5	684.0	743.7	814.3	846.8
52.5°	609.8	636.9	700.3	772.6	807.0
55°	560.9	588.1	656.8	729.2	765.4
57.5°	512.1	539.2	611.6	685.8	722.0
60°	463.2	492.2	568.2	640.6	678.6
62.5°	414.4	445.1	522.9	597.1	633.3
65°	367.3	399.9	477.7	550.1	588.1
67.5°	322.1	356.5	432.5	503.0	541.0
70°	276.8	311.2	385.4	454.2	492.2
72.5°	233.4	267.8	340.2	401.7	430.7
75°	190.0	226.2	291.3	334.8	352.8
77.5°	148.4	184.6	240.7	269.6	289.5
80°	110.4	141.1	180.9	202.7	209.9
82.5°	76.0	101.3	126.7	132.1	135.7
85°	47.0	59.7	68.8	67.0	67.0
87.5°	21.7	23.5	19.9	14.5	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)