

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: P259393

Luminaire Tested: **22CZ-LD5-34-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259393  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-34-S-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3680.0 lumens  
Efficiency: N/A  
Efficacy: 140.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

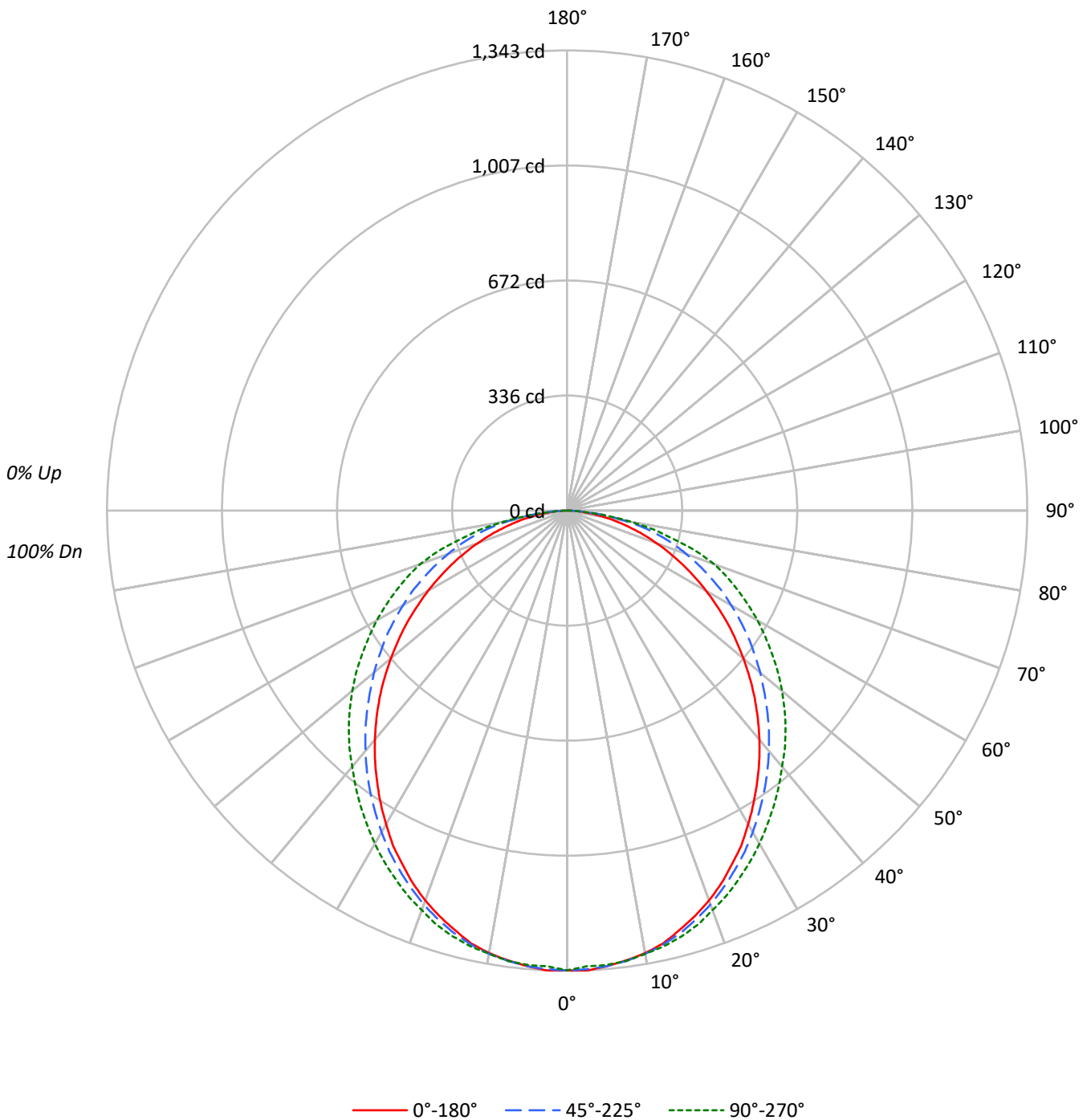
Input Watts (W): 26.226  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3610	3610	3610
5°	3605	3605	3595
10°	3584	3589	3589
15°	3531	3555	3585
20°	3467	3503	3553
25°	3380	3438	3521
30°	3284	3367	3488
35°	3176	3292	3455
40°	3067	3216	3427
45°	2946	3142	3431
50°	2812	3078	3426
55°	2678	3027	3425
60°	2521	2977	3453
65°	2364	2937	3500
70°	2183	2906	3588
75°	1966	2885	3326
80°	1726	2684	2904
85°	1420	2019	1800



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.7	3.4
10°-20°	359.9	9.8
20°-30°	534.5	14.5
30°-40°	629.2	17.1
40°-50°	641.5	17.4
50°-60°	578.5	15.7
60°-70°	455.7	12.4
70°-80°	281.1	7.6
80°-90°	73.0	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°	1021.1	27.7
0°-40°	1650.3	44.8
0°-60°	2870.3	78.0
0°-90°	3680.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3680.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1342	1342	1342	1342	1342	
5°	1334	1336	1334	1333	1331	127
15°	1267	1273	1276	1283	1287	357
25°	1138	1145	1158	1177	1186	525
35°	967	978	1002	1034	1052	605
45°	774	787	826	875	902	597
55°	571	590	645	704	730	509
65°	371	398	461	520	550	368
75°	189	221	278	309	320	202
85°	46	58	65	62	58	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1341.6	1341.6	1341.6	1341.6	1341.6
2.5°	1343.3	1343.3	1339.8	1336.3	1331.0
5°	1334.5	1336.3	1334.5	1332.7	1331.0
7.5°	1323.9	1325.7	1325.7	1325.7	1325.7
10°	1311.5	1313.3	1313.3	1313.3	1313.3
12.5°	1293.9	1295.6	1297.4	1299.2	1302.7
15°	1267.3	1272.6	1276.2	1283.2	1286.8
17.5°	1240.8	1246.1	1251.4	1260.3	1267.3
20°	1210.8	1214.3	1223.2	1233.8	1240.8
22.5°	1177.2	1182.5	1191.3	1205.5	1216.1
25°	1138.3	1145.4	1157.8	1177.2	1186.0
27.5°	1101.2	1106.5	1122.4	1143.6	1156.0
30°	1057.0	1064.1	1083.5	1110.0	1122.4
32.5°	1012.8	1021.6	1042.9	1072.9	1087.0
35°	966.9	977.5	1002.2	1034.0	1051.7
37.5°	920.9	931.5	959.8	995.1	1014.6
40°	873.2	883.8	915.6	954.5	975.7
42.5°	823.7	836.1	871.4	915.6	940.3
45°	774.2	786.6	825.5	874.9	901.5
47.5°	722.9	737.1	779.5	834.3	860.8
50°	671.7	687.6	735.3	791.9	818.4
52.5°	620.4	638.1	689.3	747.7	776.0
55°	570.9	590.4	645.2	703.5	730.0
57.5°	517.9	540.9	599.2	655.8	685.8
60°	468.4	493.1	553.2	609.8	641.6
62.5°	418.9	445.4	509.1	565.6	595.7
65°	371.2	397.7	461.3	519.7	549.7
67.5°	323.5	353.5	415.4	473.7	503.8
70°	277.5	309.3	369.4	426.0	456.0
72.5°	233.3	265.1	325.2	378.3	395.9
75°	189.1	220.9	277.5	309.3	319.9
77.5°	148.5	178.5	228.0	247.5	261.6
80°	111.4	137.9	173.2	185.6	187.4
82.5°	76.0	99.0	120.2	122.0	120.2
85°	46.0	58.3	65.4	61.9	58.3
87.5°	21.2	23.0	21.2	14.1	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)