

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: P475232

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475232
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29HE-SQR-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2733.8 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

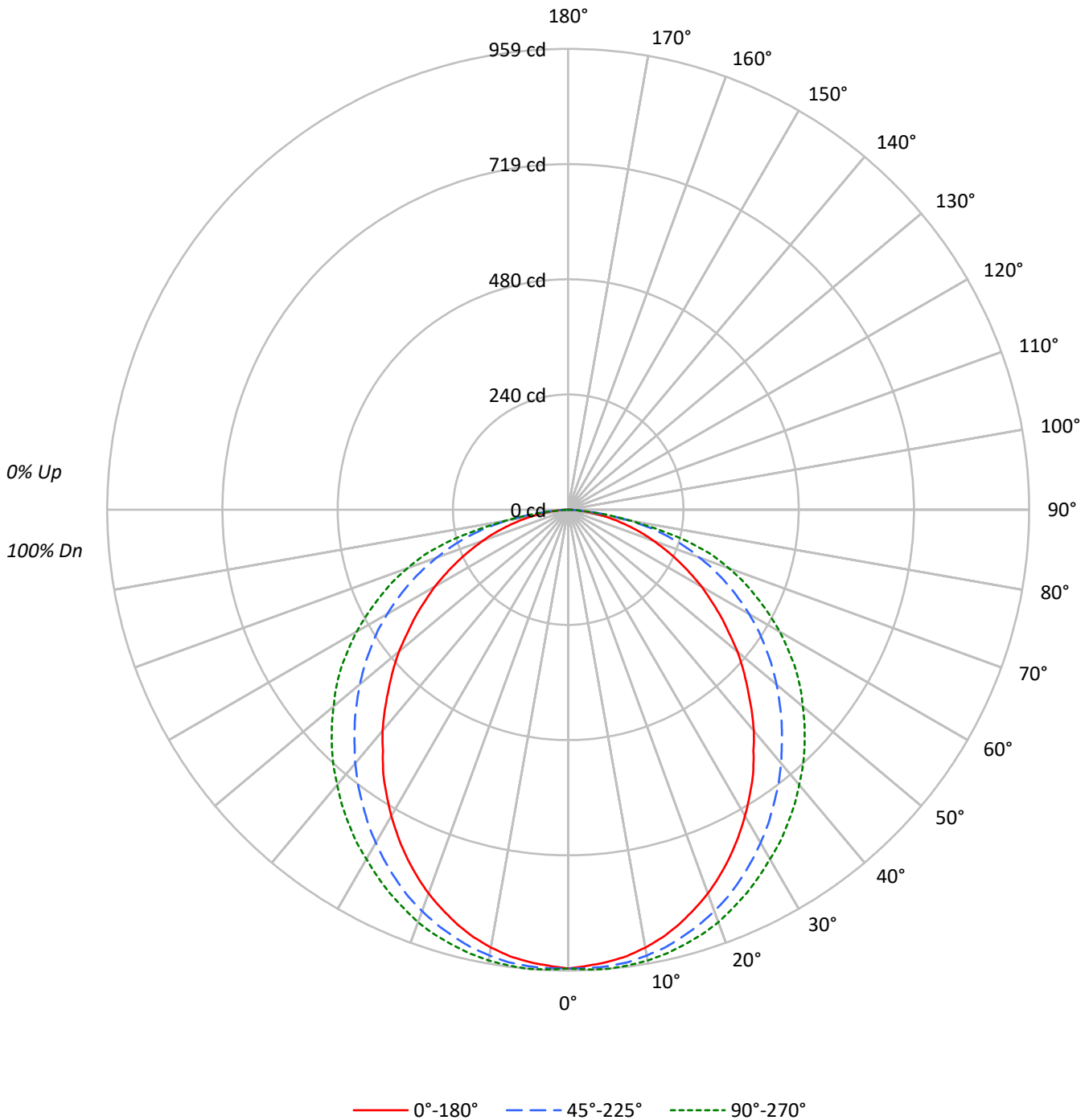
Input Watts (W): 20.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2570	2570	2570
5°	2552	2576	2591
10°	2528	2574	2602
15°	2487	2563	2610
20°	2434	2546	2616
25°	2366	2520	2612
30°	2286	2488	2609
35°	2204	2451	2617
40°	2110	2420	2626
45°	2010	2390	2647
50°	1923	2368	2667
55°	1820	2350	2709
60°	1725	2340	2738
65°	1611	2321	2759
70°	1480	2286	2797
75°	1336	2226	2697
80°	1145	1971	2032
85°	923	1161	923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	3.3
10°-20°	258.9	9.5
20°-30°	388.8	14.2
30°-40°	463.7	17.0
40°-50°	479.4	17.5
50°-60°	440.7	16.1
60°-70°	350.9	12.8
70°-80°	214.4	7.8
80°-90°	46.6	1.7
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°	738.2	27.0
0°-40°	1201.9	44.0
0°-60°	2122.0	77.6
0°-90°	2733.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2733.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	955	955	955	955	955	
5°	945	947	954	958	959	90
15°	893	903	920	933	937	251
25°	797	816	849	872	880	366
35°	671	699	746	785	797	419
45°	528	566	628	679	696	408
55°	388	431	501	558	578	347
65°	253	296	364	415	433	251
75°	128	166	214	252	259	137
85°	30	36	38	32	30	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	954.9	954.9	954.9	954.9	954.9
2.5°	949.8	951.1	954.9	957.7	957.7
5°	944.6	947.2	953.7	957.7	959.0
7.5°	936.9	940.7	949.8	954.9	956.4
10°	925.2	930.4	942.0	949.8	952.4
12.5°	910.9	918.6	933.0	943.3	945.9
15°	892.8	903.1	919.9	933.0	936.9
17.5°	872.0	884.9	905.7	921.3	926.5
20°	849.8	862.9	888.9	907.0	913.5
22.5°	824.0	840.8	870.7	891.5	896.7
25°	796.7	816.1	848.6	872.0	879.7
27.5°	766.9	790.3	825.3	853.9	860.3
30°	735.7	760.4	800.6	831.8	839.5
32.5°	703.3	731.8	774.6	809.6	820.1
35°	670.8	699.4	746.0	785.1	796.7
37.5°	633.2	666.9	718.9	759.1	773.3
40°	600.7	633.2	689.0	733.1	747.5
42.5°	564.4	599.4	657.9	705.8	722.8
45°	528.1	565.7	628.0	678.7	695.5
47.5°	494.3	532.0	596.9	650.1	666.9
50°	459.3	498.2	565.7	620.3	637.1
52.5°	421.7	464.5	534.5	589.1	608.6
55°	388.0	430.7	500.8	557.9	577.5
57.5°	352.9	397.0	469.8	524.2	542.4
60°	320.5	363.3	434.8	487.9	508.7
62.5°	285.4	329.5	399.6	451.6	471.1
65°	253.0	295.9	364.5	415.2	433.3
67.5°	220.5	263.5	328.2	376.3	397.0
70°	188.1	231.0	290.6	337.4	355.5
72.5°	159.7	197.3	254.3	297.2	314.0
75°	128.5	166.1	214.1	251.7	259.4
77.5°	99.9	133.7	173.9	190.7	193.4
80°	73.9	99.9	127.2	131.1	131.1
82.5°	49.2	68.8	79.1	80.4	79.1
85°	29.9	36.3	37.6	32.4	29.9
87.5°	10.3	10.3	6.5	3.9	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)