

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: P475267

Luminaire Tested: **22CZ2-29VHE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475267
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29VHE-SQR-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2777.9 lumens
Efficiency: N/A
Efficacy: 139.6 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

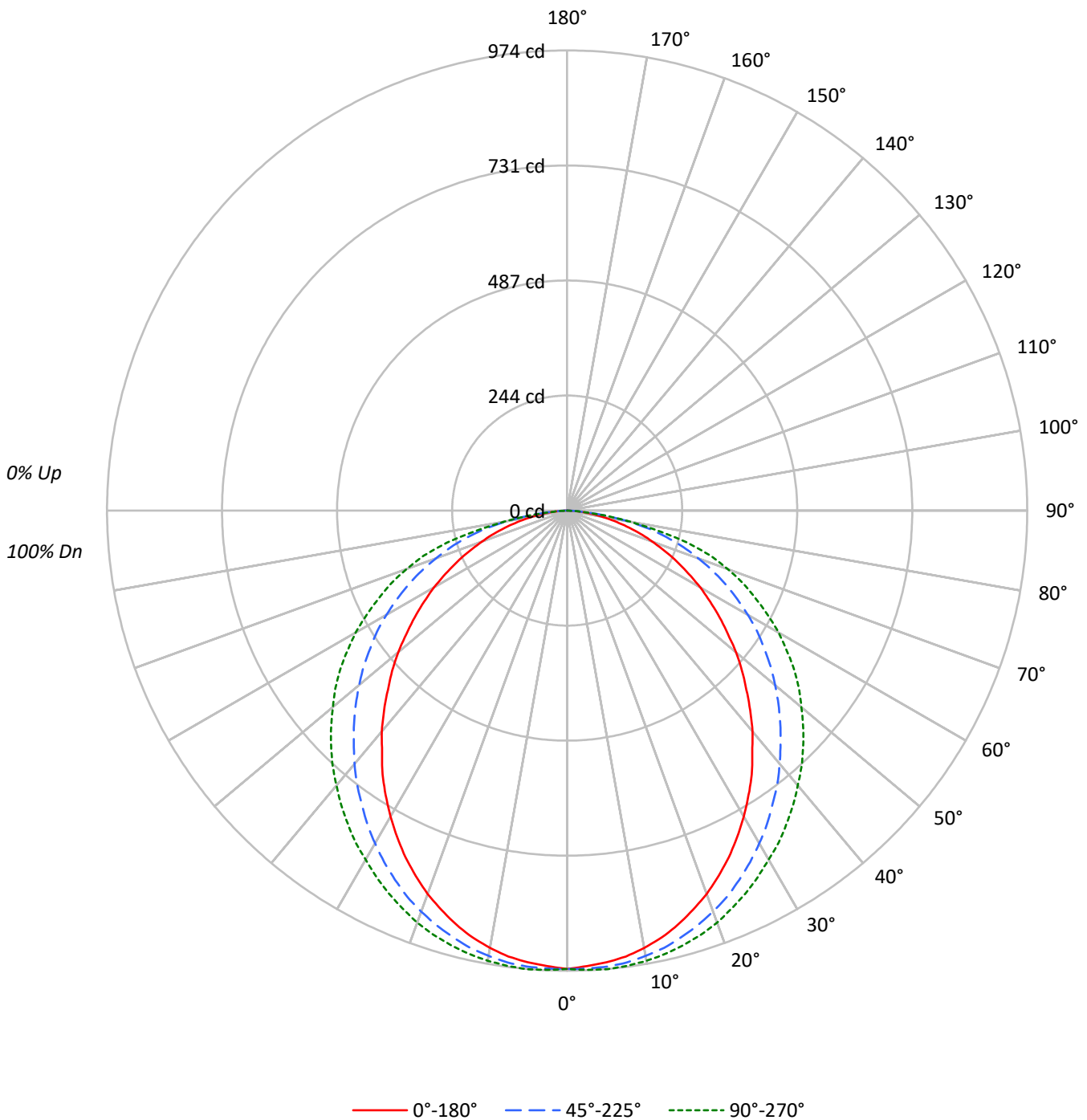
Input Watts (W): 19.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2611	2611	2611
5°	2593	2618	2632
10°	2569	2616	2644
15°	2527	2604	2652
20°	2473	2586	2658
25°	2404	2560	2654
30°	2323	2528	2651
35°	2239	2490	2660
40°	2144	2459	2668
45°	2042	2428	2689
50°	1954	2406	2710
55°	1849	2388	2753
60°	1752	2378	2782
65°	1637	2358	2804
70°	1504	2323	2842
75°	1358	2261	2741
80°	1164	2004	2064
85°	936	1179	936



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	3.3
10°-20°	263.0	9.5
20°-30°	395.1	14.2
30°-40°	471.1	17.0
40°-50°	487.1	17.5
50°-60°	447.9	16.1
60°-70°	356.5	12.8
70°-80°	217.8	7.8
80°-90°	47.3	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°	750.1	27.0
0°-40°	1221.2	44.0
0°-60°	2156.2	77.6
0°-90°	2777.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2777.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	960	962	969	973	974	91
15°	907	918	935	948	952	255
25°	810	829	862	886	894	372
35°	682	711	758	798	810	425
45°	537	575	638	690	707	415
55°	394	438	509	567	587	353
65°	257	301	370	422	440	255
75°	131	169	218	256	264	139
85°	30	37	38	33	30	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.3	970.3	970.3	970.3	970.3
2.5°	965.1	966.4	970.3	973.1	973.1
5°	959.8	962.5	969.0	973.1	974.4
7.5°	952.0	955.9	965.1	970.3	971.8
10°	940.1	945.4	957.2	965.1	967.7
12.5°	925.5	933.4	948.0	958.5	961.1
15°	907.2	917.7	934.7	948.0	952.0
17.5°	886.0	899.1	920.3	936.2	941.4
20°	863.5	876.8	903.2	921.6	928.2
22.5°	837.3	854.3	884.7	905.8	911.1
25°	809.6	829.3	862.2	886.0	893.9
27.5°	779.2	803.0	838.6	867.6	874.2
30°	747.6	772.6	813.5	845.2	853.0
32.5°	714.6	743.6	787.1	822.7	833.3
35°	681.6	710.6	758.1	797.7	809.6
37.5°	643.4	677.7	730.5	771.3	785.8
40°	610.4	643.4	700.1	744.9	759.5
42.5°	573.5	609.1	668.5	717.2	734.4
45°	536.6	574.8	638.1	689.6	706.7
47.5°	502.3	540.5	606.5	660.6	677.7
50°	466.7	506.2	574.8	630.3	647.3
52.5°	428.5	472.0	543.2	598.6	618.4
55°	394.2	437.7	508.9	566.9	586.8
57.5°	358.6	403.4	477.4	532.7	551.2
60°	325.6	369.1	441.8	495.7	516.9
62.5°	290.0	334.8	406.0	458.8	478.7
65°	257.1	300.7	370.4	421.9	440.3
67.5°	224.1	267.7	333.5	382.4	403.4
70°	191.1	234.7	295.3	342.8	361.2
72.5°	162.2	200.5	258.4	302.0	319.1
75°	130.6	168.8	217.5	255.8	263.6
77.5°	101.5	135.8	176.7	193.7	196.5
80°	75.1	101.5	129.3	133.2	133.2
82.5°	50.0	69.9	80.4	81.7	80.4
85°	30.3	36.9	38.2	33.0	30.3
87.5°	10.5	10.5	6.6	3.9	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)