

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: P475266

Luminaire Tested: **22CZ2-24VHE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475266
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24VHE-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: 2297.2 lumens
Efficiency: N/A
Efficacy: 139.2 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

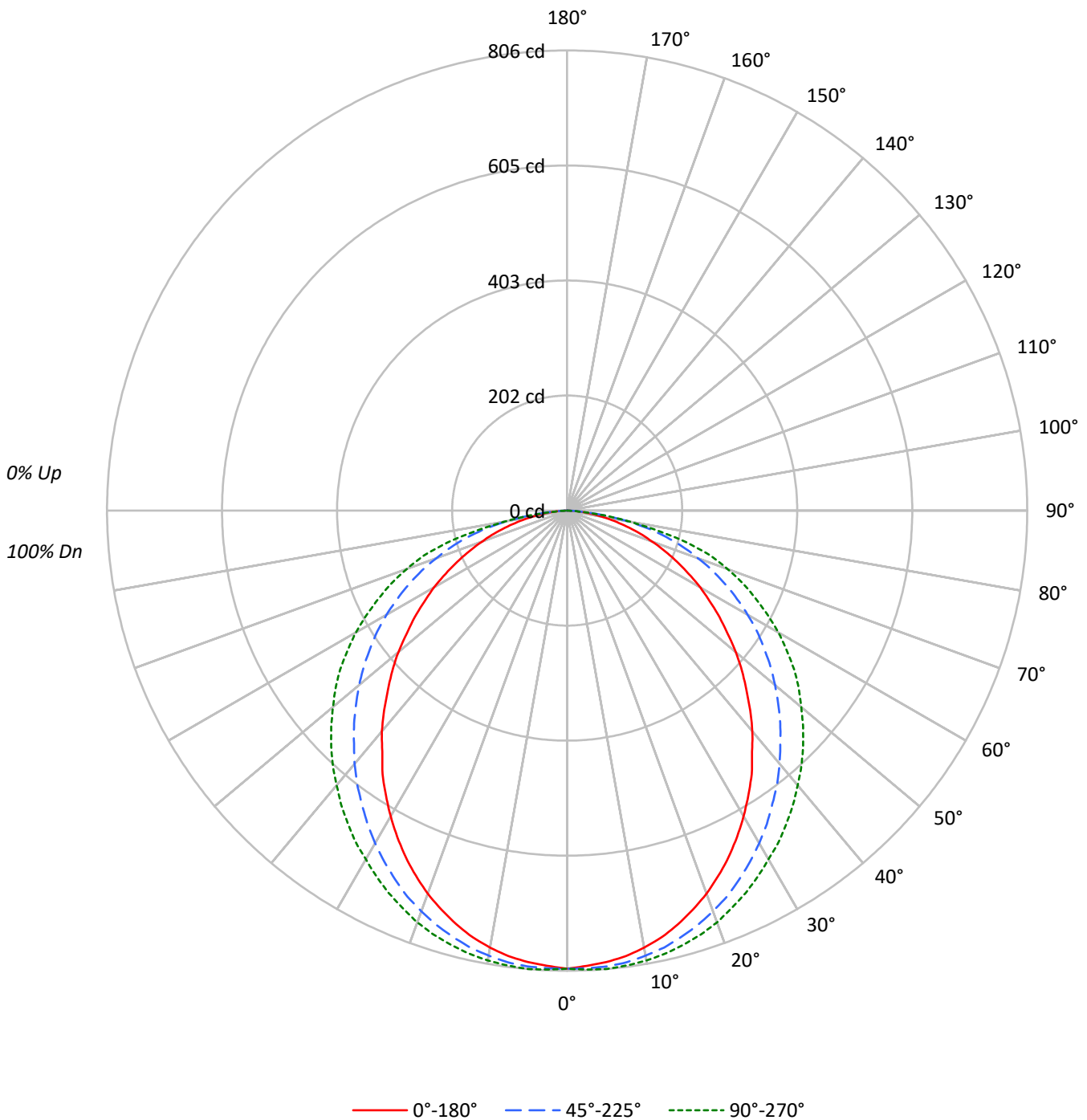
Input Watts (W): 16.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2159	2159	2159
5°	2144	2165	2177
10°	2124	2163	2187
15°	2090	2154	2193
20°	2045	2139	2198
25°	1988	2117	2195
30°	1921	2090	2192
35°	1852	2059	2199
40°	1773	2034	2206
45°	1689	2008	2224
50°	1616	1990	2241
55°	1529	1974	2276
60°	1449	1966	2300
65°	1354	1950	2318
70°	1243	1921	2350
75°	1123	1870	2267
80°	962	1657	1706
85°	775	976	775



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.1	3.3
10°-20°	217.5	9.5
20°-30°	326.7	14.2
30°-40°	389.6	17.0
40°-50°	402.8	17.5
50°-60°	370.3	16.1
60°-70°	294.8	12.8
70°-80°	180.1	7.8
80°-90°	39.2	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°	620.3	27.0
0°-40°	1009.9	44.0
0°-60°	1783.1	77.6
0°-90°	2297.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2297.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	794	796	801	805	806	75
15°	750	759	773	784	787	211
25°	670	686	713	733	739	308
35°	564	588	627	660	670	352
45°	444	475	528	570	584	343
55°	326	362	421	469	485	292
65°	213	249	306	349	364	211
75°	108	140	180	212	218	115
85°	25	30	32	27	25	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	802.4	802.4	802.4	802.4	802.4
2.5°	798.1	799.2	802.4	804.7	804.7
5°	793.7	795.9	801.3	804.7	805.8
7.5°	787.2	790.5	798.1	802.4	803.6
10°	777.4	781.8	791.6	798.1	800.2
12.5°	765.4	771.9	784.0	792.6	794.8
15°	750.2	758.9	773.0	784.0	787.2
17.5°	732.7	743.5	761.0	774.2	778.5
20°	714.1	725.1	746.9	762.1	767.5
22.5°	692.4	706.5	731.6	749.1	753.4
25°	669.5	685.8	713.0	732.7	739.2
27.5°	644.4	664.0	693.5	717.5	722.9
30°	618.2	638.9	672.7	698.9	705.4
32.5°	590.9	614.9	650.9	680.3	689.1
35°	563.7	587.7	626.9	659.7	669.5
37.5°	532.0	560.4	604.1	637.9	649.8
40°	504.8	532.0	579.0	616.0	628.1
42.5°	474.3	503.7	552.8	593.1	607.3
45°	443.7	475.3	527.7	570.3	584.4
47.5°	415.4	447.0	501.5	546.3	560.4
50°	385.9	418.6	475.3	521.2	535.3
52.5°	354.3	390.3	449.2	495.0	511.4
55°	326.0	361.9	420.8	468.8	485.2
57.5°	296.5	333.6	394.8	440.5	455.8
60°	269.3	305.2	365.3	410.0	427.4
62.5°	239.8	276.9	335.8	379.4	395.8
65°	212.6	248.7	306.3	348.9	364.1
67.5°	185.3	221.4	275.8	316.2	333.6
70°	158.0	194.1	244.2	283.5	298.7
72.5°	134.2	165.8	213.7	249.7	263.9
75°	108.0	139.6	179.9	211.5	218.0
77.5°	84.0	112.3	146.1	160.2	162.5
80°	62.1	84.0	106.9	110.1	110.1
82.5°	41.4	57.8	66.5	67.6	66.5
85°	25.1	30.5	31.6	27.3	25.1
87.5°	8.7	8.7	5.4	3.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)