

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: P475274

Luminaire Tested: **22CZ2-70VHE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475274
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-70VHE-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: 6624.6 lumens
Efficiency: N/A
Efficacy: 134.4 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

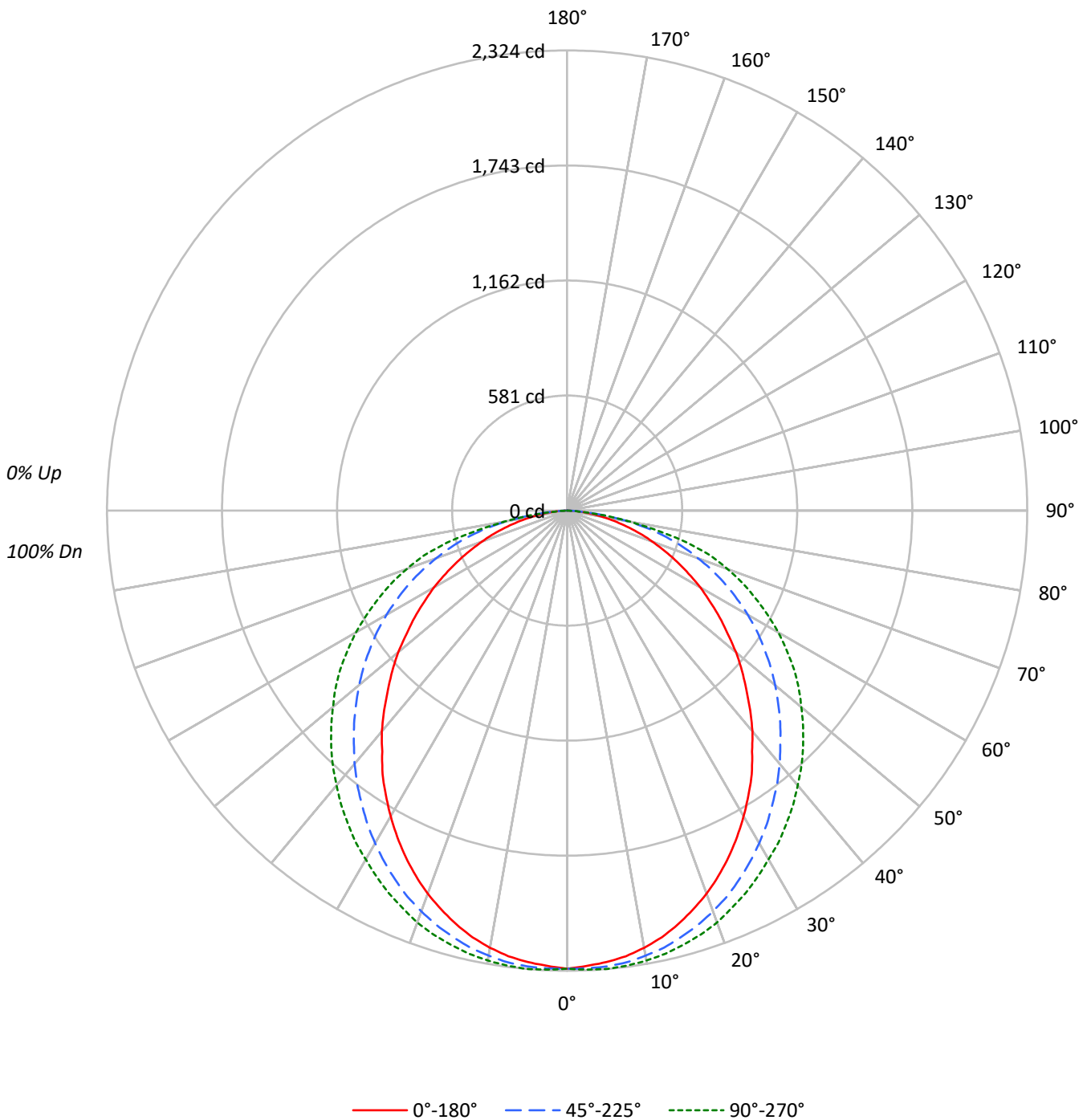
Input Watts (W): 49.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6227	6227	6227
5°	6183	6242	6277
10°	6126	6237	6306
15°	6027	6210	6325
20°	5897	6168	6339
25°	5732	6105	6329
30°	5539	6028	6321
35°	5340	5939	6342
40°	5114	5865	6363
45°	4870	5791	6414
50°	4659	5739	6463
55°	4411	5693	6565
60°	4180	5670	6634
65°	3903	5625	6686
70°	3586	5541	6777
75°	3238	5393	6537
80°	2777	4778	4922
85°	2235	2816	2235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.4	3.3
10°-20°	627.3	9.5
20°-30°	942.1	14.2
30°-40°	1123.6	17.0
40°-50°	1161.7	17.5
50°-60°	1068.0	16.1
60°-70°	850.2	12.8
70°-80°	519.5	7.8
80°-90°	112.9	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°	1788.7	27.0
0°-40°	2912.3	44.0
0°-60°	5142.0	77.6
0°-90°	6624.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6624.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2314	2314	2314	2314	2314	
5°	2289	2295	2311	2321	2324	217
15°	2163	2188	2229	2261	2270	609
25°	1931	1978	2056	2113	2132	888
35°	1626	1695	1808	1902	1931	1014
45°	1280	1371	1522	1645	1685	990
55°	940	1044	1214	1352	1399	841
65°	613	717	883	1006	1050	607
75°	311	402	519	610	629	332
85°	72	88	91	79	72	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2314.0	2314.0	2314.0	2314.0	2314.0
2.5°	2301.5	2304.6	2314.0	2320.6	2320.6
5°	2288.9	2295.2	2310.9	2320.6	2323.7
7.5°	2270.2	2279.6	2301.5	2314.0	2317.5
10°	2242.0	2254.5	2282.7	2301.5	2307.7
12.5°	2207.2	2226.0	2260.8	2285.8	2292.1
15°	2163.4	2188.4	2229.1	2260.8	2270.2
17.5°	2112.9	2144.2	2194.7	2232.6	2245.1
20°	2059.3	2091.0	2154.0	2197.8	2213.5
22.5°	1996.7	2037.4	2109.8	2160.2	2172.7
25°	1930.6	1977.6	2056.2	2112.9	2131.7
27.5°	1858.2	1914.9	1999.8	2069.1	2084.7
30°	1782.7	1842.6	1940.0	2015.5	2034.3
32.5°	1704.1	1773.3	1877.0	1961.9	1987.3
35°	1625.5	1694.7	1807.8	1902.4	1930.6
37.5°	1534.3	1616.1	1742.0	1839.4	1873.9
40°	1455.7	1534.3	1669.7	1776.5	1811.3
42.5°	1367.7	1452.6	1594.2	1710.4	1751.4
45°	1279.6	1370.8	1521.8	1644.6	1685.3
47.5°	1197.9	1289.0	1446.3	1575.4	1616.1
50°	1113.0	1207.3	1370.8	1503.0	1543.7
52.5°	1021.8	1125.5	1295.3	1427.5	1474.8
55°	940.1	1043.8	1213.5	1352.0	1399.3
57.5°	855.2	962.0	1138.4	1270.2	1314.4
60°	776.6	880.2	1053.5	1182.2	1232.7
62.5°	691.7	798.5	968.3	1094.2	1141.5
65°	613.0	717.1	883.4	1006.2	1050.0
67.5°	534.4	638.4	795.3	911.9	962.0
70°	455.8	559.8	704.2	817.6	861.4
72.5°	386.9	478.0	616.2	720.2	760.9
75°	311.4	402.5	518.7	609.9	628.7
77.5°	242.2	323.9	421.3	462.0	468.6
80°	179.2	242.2	308.3	317.6	317.6
82.5°	119.3	166.7	191.7	194.8	191.7
85°	72.4	88.0	91.2	78.6	72.4
87.5°	25.1	25.1	15.7	9.4	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)