

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: P475272

Luminaire Tested: **22CZ2-60VHE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475272
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-60VHE-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: 5739.2 lumens
Efficiency: N/A
Efficacy: 136.3 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

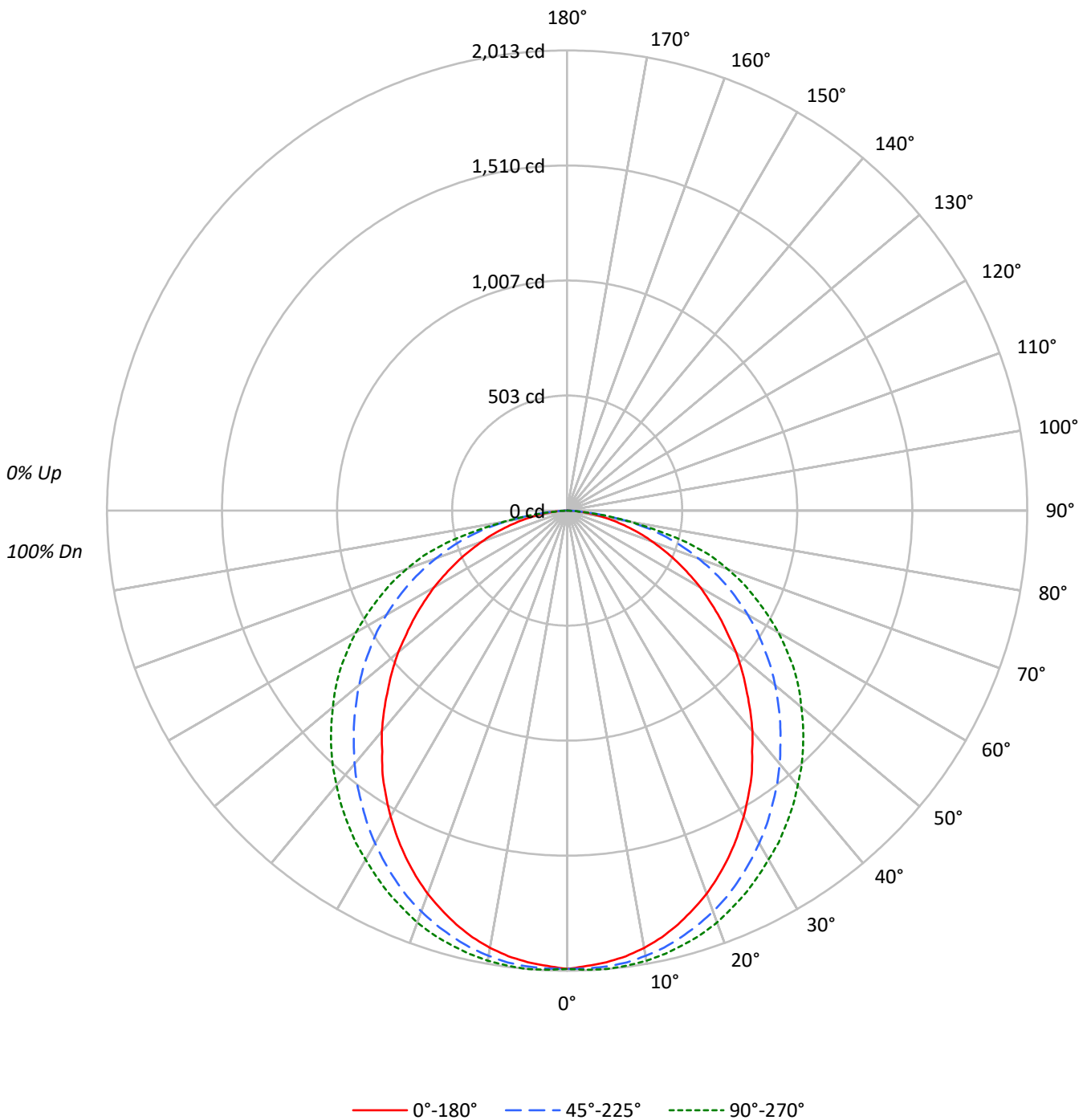
Input Watts (W): 42.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5395	5395	5395
5°	5357	5408	5438
10°	5307	5404	5463
15°	5221	5380	5479
20°	5109	5344	5491
25°	4966	5289	5483
30°	4799	5222	5476
35°	4626	5145	5495
40°	4430	5081	5512
45°	4219	5017	5557
50°	4037	4972	5599
55°	3821	4932	5688
60°	3621	4912	5747
65°	3382	4873	5792
70°	3107	4800	5872
75°	2805	4672	5663
80°	2405	4139	4265
85°	1936	2439	1936



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.1	3.3
10°-20°	543.4	9.5
20°-30°	816.2	14.2
30°-40°	973.4	17.0
40°-50°	1006.4	17.5
50°-60°	925.3	16.1
60°-70°	736.6	12.8
70°-80°	450.0	7.8
80°-90°	97.8	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°	1549.7	27.0
0°-40°	2523.1	44.0
0°-60°	4454.7	77.6
0°-90°	5739.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5739.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2005	2005	2005	2005	2005	
5°	1983	1988	2002	2010	2013	188
15°	1874	1896	1931	1959	1967	528
25°	1673	1713	1781	1830	1847	769
35°	1408	1468	1566	1648	1673	879
45°	1109	1188	1318	1425	1460	857
55°	814	904	1051	1171	1212	728
65°	531	621	765	872	910	526
75°	270	349	449	528	545	287
85°	63	76	79	68	63	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2004.7	2004.7	2004.7	2004.7	2004.7
2.5°	1993.9	1996.6	2004.7	2010.4	2010.4
5°	1983.0	1988.4	2002.0	2010.4	2013.2
7.5°	1966.7	1974.9	1993.9	2004.7	2007.7
10°	1942.3	1953.2	1977.6	1993.9	1999.3
12.5°	1912.2	1928.5	1958.6	1980.3	1985.7
15°	1874.2	1895.9	1931.2	1958.6	1966.7
17.5°	1830.5	1857.6	1901.3	1934.2	1945.0
20°	1784.1	1811.5	1866.1	1904.0	1917.6
22.5°	1729.8	1765.1	1827.8	1871.5	1882.3
25°	1672.6	1713.2	1781.4	1830.5	1846.8
27.5°	1609.9	1659.0	1732.5	1792.5	1806.1
30°	1544.5	1596.3	1680.7	1746.1	1762.4
32.5°	1476.3	1536.3	1626.1	1699.7	1721.7
35°	1408.2	1468.2	1566.2	1648.1	1672.6
37.5°	1329.2	1400.1	1509.2	1593.6	1623.4
40°	1261.1	1329.2	1446.5	1539.0	1569.2
42.5°	1184.9	1258.4	1381.1	1481.8	1517.3
45°	1108.6	1187.6	1318.4	1424.8	1460.1
47.5°	1037.8	1116.7	1253.0	1364.8	1400.1
50°	964.2	1045.9	1187.6	1302.1	1337.4
52.5°	885.3	975.1	1122.2	1236.7	1277.7
55°	814.4	904.2	1051.3	1171.3	1212.3
57.5°	740.9	833.4	986.2	1100.5	1138.7
60°	672.8	762.6	912.7	1024.2	1067.9
62.5°	599.2	691.7	838.8	948.0	988.9
65°	531.1	621.2	765.3	871.7	909.7
67.5°	463.0	553.1	689.0	790.0	833.4
70°	394.9	485.0	610.1	708.3	746.3
72.5°	335.2	414.1	533.8	623.9	659.2
75°	269.8	348.7	449.4	528.4	544.7
77.5°	209.8	280.6	365.0	400.3	406.0
80°	155.2	209.8	267.1	275.2	275.2
82.5°	103.4	144.4	166.1	168.8	166.1
85°	62.7	76.3	79.0	68.1	62.7
87.5°	21.7	21.7	13.6	8.1	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)