

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: P474808

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474808
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-60VHE-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

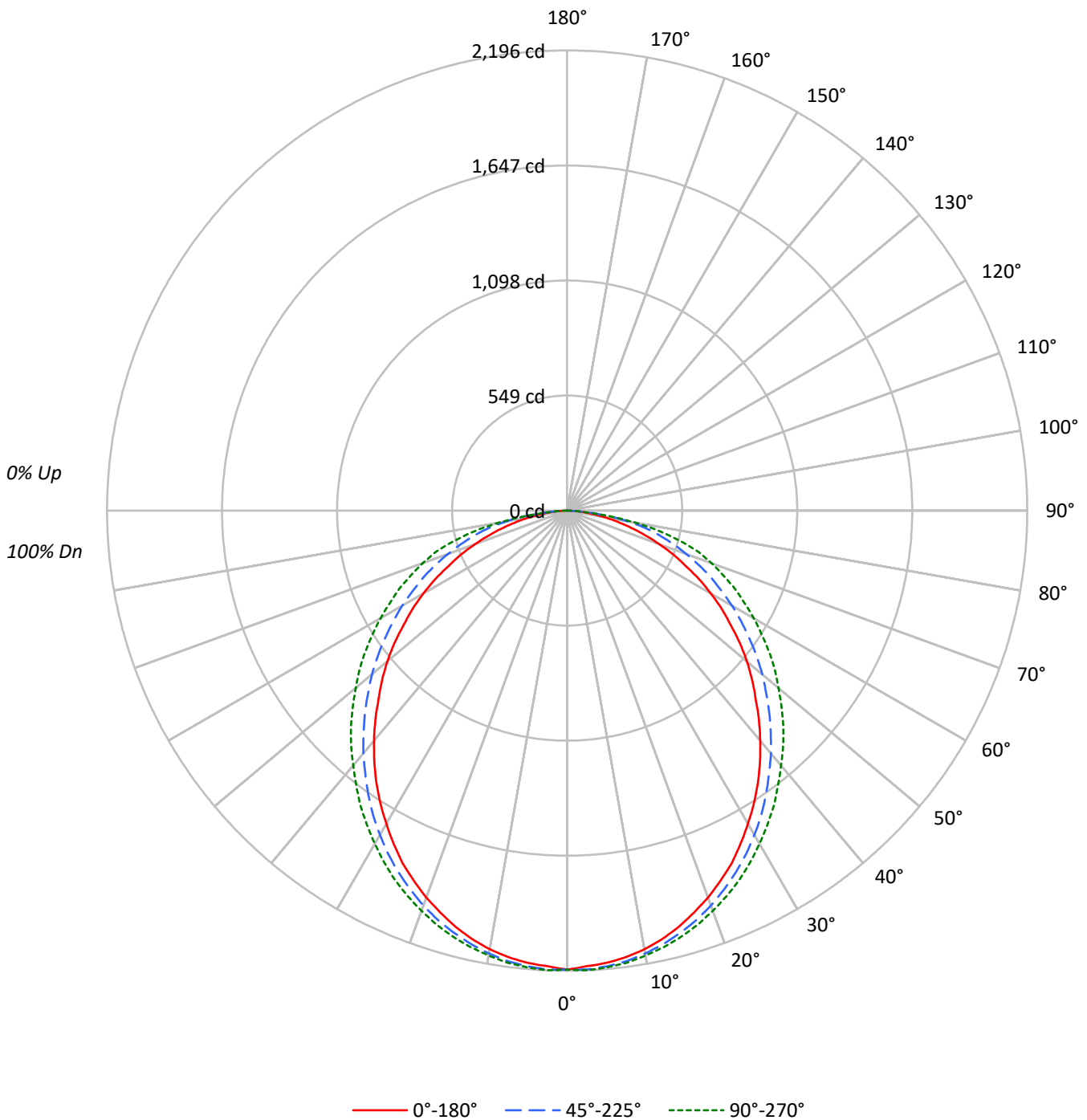
Lumens per Lamp: N/A
Luminaire Lumens: 6040.8 lumens
Efficiency: N/A
Efficacy: 143.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5895	5895	5895
5°	5852	5897	5911
10°	5808	5864	5892
15°	5729	5811	5865
20°	5626	5743	5820
25°	5515	5655	5773
30°	5363	5554	5704
35°	5213	5435	5649
40°	5036	5314	5579
45°	4844	5194	5553
50°	4687	5088	5510
55°	4468	4977	5522
60°	4267	4892	5538
65°	3967	4828	5625
70°	3666	4761	5766
75°	3278	4739	5801
80°	2751	4491	5064
85°	2127	3075	2878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.0	3.4
10°-20°	587.5	9.7
20°-30°	876.1	14.5
30°-40°	1034.2	17.1
40°-50°	1054.0	17.4
50°-60°	950.5	15.7
60°-70°	747.1	12.4
70°-80°	467.8	7.7
80°-90°	116.6	1.9
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°	1670.6	27.7
0°-40°	2704.7	44.8
0°-60°	4709.3	78.0
0°-90°	6040.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6040.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2191	2191	2191	2191	2191	
5°	2166	2172	2183	2188	2188	206
15°	2057	2066	2086	2101	2105	579
25°	1858	1872	1905	1934	1944	854
35°	1587	1607	1654	1700	1720	992
45°	1273	1301	1365	1431	1459	985
55°	952	982	1061	1143	1177	855
65°	623	661	758	843	883	621
75°	315	363	456	538	558	335
85°	69	88	100	100	93	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2190.7	2190.7	2190.7	2190.7	2190.7
2.5°	2176.6	2181.8	2192.0	2195.8	2195.8
5°	2166.4	2171.5	2183.0	2188.1	2188.1
7.5°	2149.8	2154.9	2169.0	2175.4	2176.6
10°	2125.6	2132.0	2146.0	2156.2	2156.2
12.5°	2094.9	2101.3	2119.2	2132.0	2133.2
15°	2056.6	2065.6	2086.0	2101.3	2105.2
17.5°	2012.0	2026.0	2049.0	2068.1	2072.0
20°	1964.7	1978.8	2005.6	2027.3	2032.4
22.5°	1912.4	1925.2	1957.1	1983.9	1990.3
25°	1857.5	1871.5	1904.7	1934.1	1944.3
27.5°	1792.4	1809.0	1848.6	1881.7	1892.0
30°	1726.0	1746.4	1787.3	1824.3	1835.8
32.5°	1658.3	1677.5	1723.4	1763.0	1778.3
35°	1586.8	1607.3	1654.5	1700.5	1719.6
37.5°	1511.5	1532.0	1583.0	1635.4	1653.2
40°	1433.7	1457.9	1512.8	1569.0	1588.1
42.5°	1354.5	1380.0	1437.5	1500.0	1525.6
45°	1272.8	1300.9	1364.7	1431.1	1459.2
47.5°	1198.8	1221.7	1288.1	1360.9	1387.7
50°	1119.6	1141.3	1215.3	1288.1	1316.2
52.5°	1039.2	1059.6	1138.8	1215.3	1249.8
55°	952.4	981.7	1060.9	1142.6	1177.1
57.5°	875.8	902.6	984.3	1067.3	1100.5
60°	792.8	820.9	909.0	993.2	1029.0
62.5°	709.8	740.4	829.8	920.4	953.6
65°	623.0	661.3	758.3	842.6	883.4
67.5°	548.9	586.0	681.7	769.8	805.6
70°	466.0	509.4	605.1	694.5	732.8
72.5°	388.1	431.5	529.8	619.2	657.5
75°	315.3	362.6	455.8	537.5	557.9
77.5°	245.1	289.8	383.0	430.2	451.9
80°	177.5	220.9	289.8	321.7	326.8
82.5°	120.0	157.0	196.6	205.5	200.4
85°	68.9	88.1	99.6	99.6	93.2
87.5°	28.1	28.1	24.3	15.3	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)