

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: P475502

Luminaire Tested: **14CZ2-60HE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475502
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-60HE-SQR-UNV-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

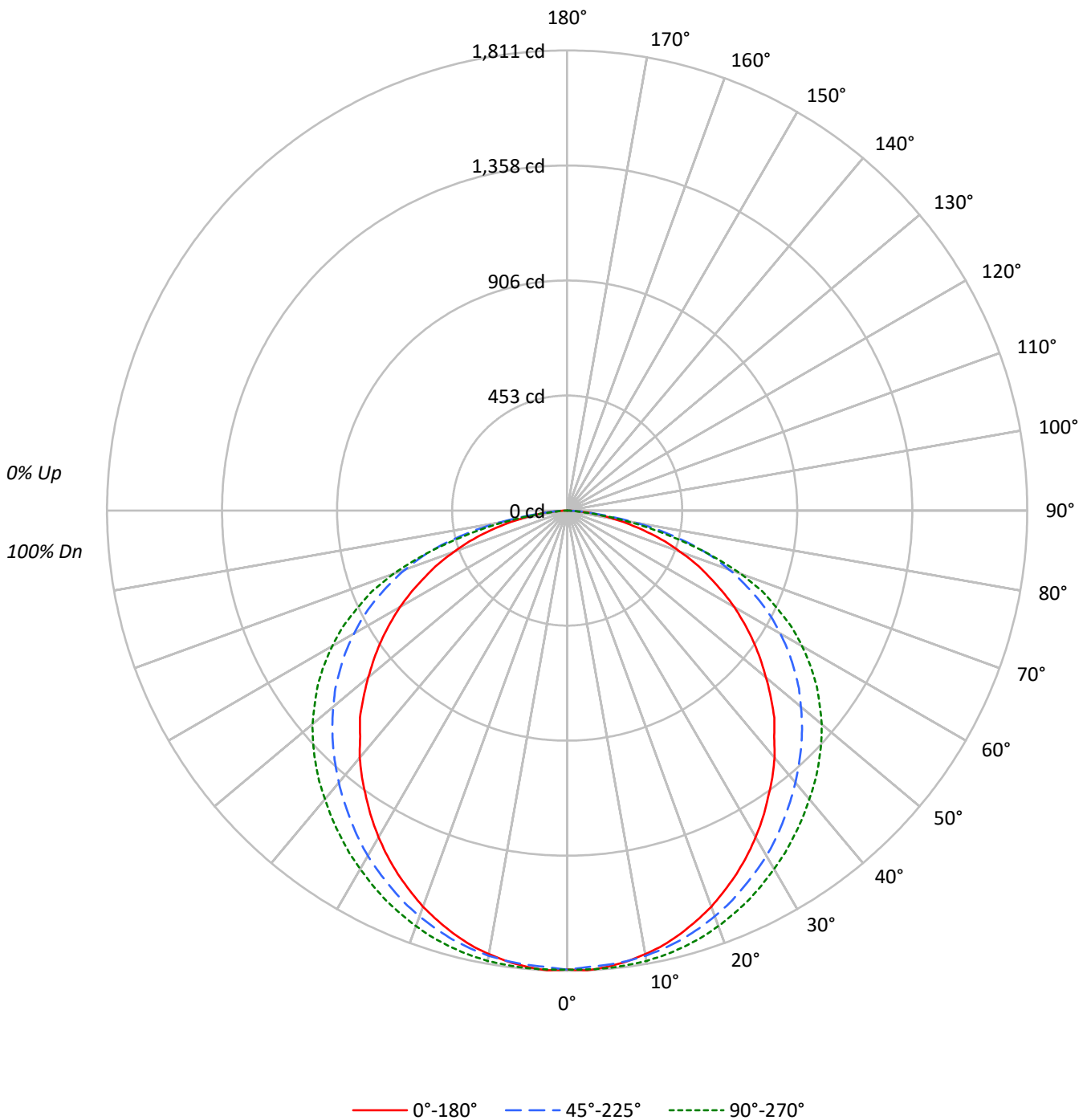
Lumens per Lamp: N/A
Luminaire Lumens: 5670.9 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.34 / 1.43
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44.6
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	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	74		81	76	72		77	74	70	68
3	89	78	69	63	86	76	68	62	73	67	61		70	65	60		68	63	59	57
4	81	69	60	53	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		49	43	38	36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24		36	29	24		35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4860	4860	4860
5°	4870	4849	4883
10°	4843	4861	4918
15°	4804	4867	4951
20°	4751	4865	4984
25°	4683	4863	5021
30°	4612	4876	5060
35°	4529	4881	5123
40°	4461	4911	5208
45°	4387	4960	5332
50°	4277	5027	5477
55°	4192	5116	5619
60°	4085	5214	5748
65°	3926	5301	5812
70°	3717	5342	5707
75°	3396	5161	4928
80°	2853	4218	3673
85°	2078	2127	1383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.5	3.0
10°-20°	494.3	8.7
20°-30°	755.8	13.3
30°-40°	927.7	16.4
40°-50°	997.7	17.6
50°-60°	957.7	16.9
60°-70°	793.4	14.0
70°-80°	475.5	8.4
80°-90°	97.3	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°	1421.7	25.1
0°-40°	2349.4	41.4
0°-60°	4304.7	75.9
0°-90°	5670.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5670.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1806	1806	1806	1806	1806	
5°	1803	1800	1795	1809	1808	171
15°	1724	1732	1747	1774	1777	486
25°	1577	1603	1638	1681	1691	727
35°	1379	1425	1486	1544	1560	863
45°	1153	1214	1303	1375	1401	886
55°	894	978	1090	1170	1198	798
65°	616	717	833	898	913	611
75°	327	426	496	485	474	345
85°	67	98	69	46	45	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1806.2	1806.2	1806.2	1806.2	1806.2
2.5°	1811.0	1806.2	1798.2	1811.0	1807.8
5°	1803.0	1799.8	1795.0	1809.4	1807.8
7.5°	1790.2	1790.2	1788.6	1806.2	1804.6
10°	1772.5	1775.7	1778.9	1799.8	1799.8
12.5°	1751.7	1754.9	1764.5	1788.6	1790.2
15°	1724.5	1732.5	1746.9	1774.1	1777.3
17.5°	1692.5	1705.3	1724.5	1756.5	1761.3
20°	1658.9	1673.3	1698.9	1734.1	1740.5
22.5°	1618.8	1639.6	1671.7	1708.5	1716.5
25°	1577.2	1602.8	1638.0	1681.3	1690.9
27.5°	1532.4	1562.8	1604.4	1649.3	1660.5
30°	1484.3	1519.6	1569.2	1617.2	1628.4
32.5°	1433.1	1474.7	1529.2	1582.0	1596.4
35°	1378.6	1425.1	1485.9	1543.6	1559.6
37.5°	1325.8	1375.4	1442.7	1505.1	1522.8
40°	1269.8	1322.6	1397.9	1463.5	1482.7
42.5°	1205.7	1269.8	1351.4	1421.9	1444.3
45°	1152.9	1213.7	1303.4	1375.4	1401.1
47.5°	1087.2	1157.7	1253.8	1330.6	1356.2
50°	1021.6	1101.6	1200.9	1281.0	1308.2
52.5°	957.5	1039.2	1149.7	1228.1	1252.1
55°	893.5	978.3	1090.4	1170.5	1197.7
57.5°	826.2	919.1	1032.8	1112.8	1135.3
60°	759.0	851.8	968.7	1045.6	1068.0
62.5°	688.5	787.8	904.7	975.1	997.6
65°	616.5	717.3	832.6	898.3	912.7
67.5°	549.2	651.7	755.8	816.6	831.0
70°	472.4	581.2	678.9	723.7	725.3
72.5°	401.9	502.8	595.7	608.5	605.3
75°	326.6	425.9	496.4	485.2	474.0
77.5°	253.0	353.9	390.7	358.7	350.7
80°	184.1	275.4	272.2	241.8	237.0
82.5°	126.5	190.5	156.9	128.1	118.5
85°	67.3	97.7	68.9	46.4	44.8
87.5°	25.6	24.0	14.4	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)