

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: P475466

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475466
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-60HE-HRP-UNV-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4835.3 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

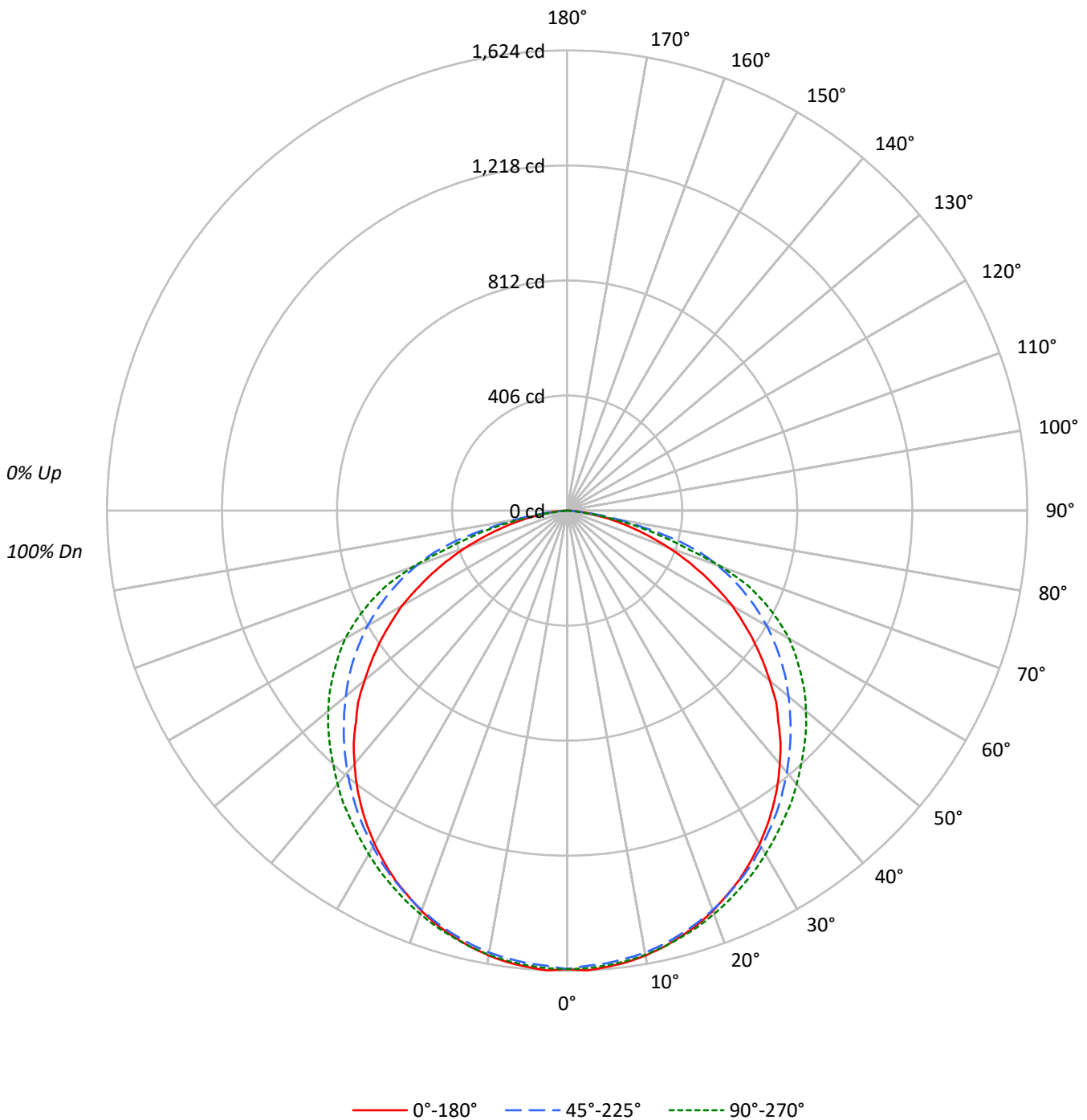
Input Watts (W): 44.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	41	33	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4355	4355	4355
5°	4368	4331	4351
10°	4357	4328	4349
15°	4334	4313	4342
20°	4305	4297	4340
25°	4269	4278	4340
30°	4222	4259	4351
35°	4169	4247	4375
40°	4101	4238	4427
45°	4011	4244	4500
50°	3906	4269	4606
55°	3775	4322	4728
60°	3624	4379	4869
65°	3346	4420	4896
70°	2984	4440	4534
75°	2499	4113	3524
80°	1897	2892	2314
85°	1337	1013	324



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.2	3.2
10°-20°	438.9	9.1
20°-30°	667.2	13.8
30°-40°	812.3	16.8
40°-50°	862.9	17.8
50°-60°	816.3	16.9
60°-70°	661.4	13.7
70°-80°	362.6	7.5
80°-90°	60.6	1.3
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°	1259.3	26.0
0°-40°	2071.5	42.8
0°-60°	3750.7	77.6
0°-90°	4835.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4835.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1617	1614	1603	1614	1611	154
15°	1556	1553	1548	1560	1559	439
25°	1438	1438	1441	1460	1462	662
35°	1269	1274	1293	1324	1332	793
45°	1054	1070	1115	1166	1182	815
55°	805	840	921	988	1008	719
65°	526	585	694	755	769	520
75°	240	331	396	349	339	257
85°	43	57	33	16	10	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1618.4	1618.4	1618.4	1618.4	1618.4
2.5°	1624.3	1618.4	1607.9	1618.4	1616.9
5°	1616.9	1613.9	1603.4	1613.9	1610.9
7.5°	1607.9	1604.9	1594.5	1606.4	1603.4
10°	1594.5	1591.5	1584.0	1594.5	1591.5
12.5°	1576.6	1575.1	1567.6	1579.6	1576.6
15°	1555.7	1552.7	1548.2	1560.1	1558.7
17.5°	1531.8	1528.8	1525.8	1540.7	1539.2
20°	1503.4	1501.9	1500.4	1516.8	1515.4
22.5°	1470.6	1470.6	1472.1	1490.0	1490.0
25°	1437.7	1437.7	1440.7	1460.1	1461.6
27.5°	1398.9	1401.9	1407.9	1428.8	1433.2
30°	1358.6	1361.6	1370.5	1394.4	1400.4
32.5°	1315.3	1319.8	1331.7	1360.1	1366.1
35°	1269.0	1273.5	1292.9	1324.3	1331.7
37.5°	1219.7	1227.2	1249.6	1285.4	1298.9
40°	1167.5	1179.4	1206.3	1245.1	1260.1
42.5°	1115.2	1125.7	1161.5	1206.3	1221.2
45°	1054.0	1070.5	1115.2	1166.0	1182.4
47.5°	1000.3	1015.2	1067.5	1124.2	1143.6
50°	933.1	955.5	1019.7	1082.4	1100.3
52.5°	868.9	898.8	971.9	1036.1	1057.0
55°	804.7	840.5	921.2	988.3	1007.7
57.5°	737.5	776.3	867.4	936.1	957.0
60°	673.3	715.1	813.7	883.8	904.7
62.5°	597.2	649.4	755.4	822.6	840.5
65°	525.5	585.2	694.2	755.4	768.9
67.5°	452.4	522.5	631.5	685.3	689.7
70°	379.2	458.3	564.3	597.2	576.3
72.5°	307.5	395.6	492.7	465.8	441.9
75°	240.4	331.4	395.6	349.4	338.9
77.5°	177.7	271.7	276.2	253.8	246.3
80°	122.4	210.5	186.6	161.2	149.3
82.5°	79.1	129.9	103.0	76.1	68.7
85°	43.3	56.7	32.8	16.4	10.5
87.5°	16.4	10.5	4.5	4.5	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)