

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: P474416

Luminaire Tested: **24CZ2-55-HRP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474416
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55-HRP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4418.4 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

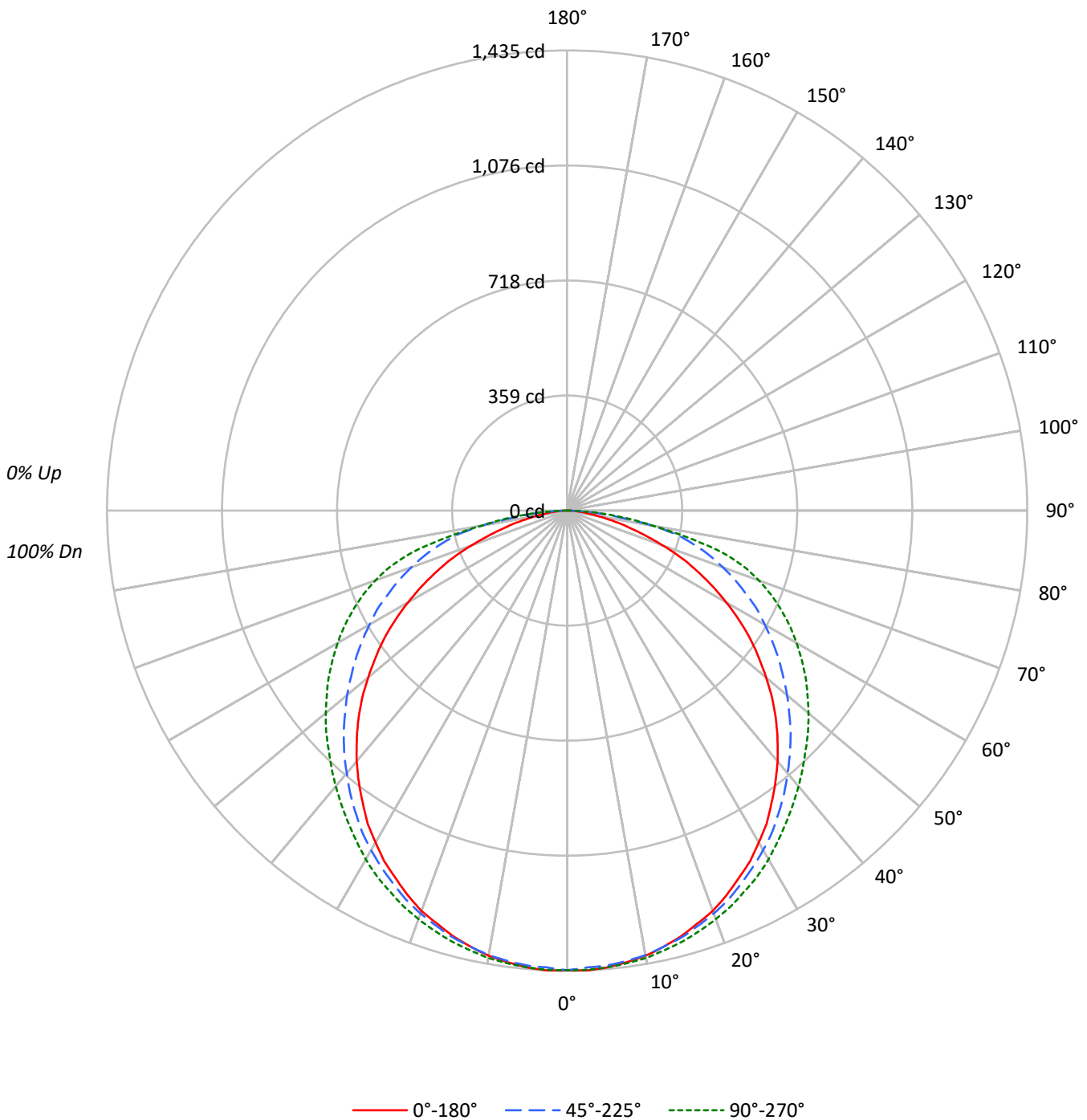
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	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	42	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	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1929	1929	1929
5°	1931	1924	1931
10°	1926	1923	1936
15°	1914	1920	1938
20°	1902	1915	1941
25°	1878	1906	1944
30°	1856	1899	1951
35°	1826	1890	1954
40°	1793	1878	1972
45°	1753	1876	2003
50°	1696	1874	2056
55°	1636	1887	2130
60°	1543	1916	2225
65°	1425	1961	2350
70°	1244	2030	2504
75°	1010	2135	2587
80°	746	2094	2094
85°	571	1542	1741



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.8	3.1
10°-20°	390.0	8.8
20°-30°	593.7	13.4
30°-40°	720.9	16.3
40°-50°	761.6	17.2
50°-60°	718.6	16.3
60°-70°	597.5	13.5
70°-80°	393.1	8.9
80°-90°	107.2	2.4
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°	1119.4	25.3
0°-40°	1840.3	41.7
0°-60°	3320.6	75.2
0°-90°	4418.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4418.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1434	1434	1434	1434	1434	
5°	1430	1430	1424	1430	1430	136
15°	1374	1376	1378	1391	1391	388
25°	1265	1272	1284	1306	1310	584
35°	1112	1125	1150	1180	1189	696
45°	921	940	986	1034	1052	709
55°	697	727	805	880	908	621
65°	448	500	616	707	738	442
75°	194	283	411	486	498	209
85°	37	81	100	111	113	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1433.5	1433.5	1433.5	1433.5	1433.5
2.5°	1435.4	1433.5	1426.1	1433.5	1433.5
5°	1429.9	1429.9	1424.2	1429.9	1429.9
7.5°	1420.6	1420.6	1416.8	1424.2	1424.2
10°	1409.4	1409.4	1407.7	1416.8	1416.8
12.5°	1392.9	1394.6	1392.9	1403.9	1403.9
15°	1374.3	1376.2	1378.1	1391.0	1391.0
17.5°	1350.4	1354.0	1357.8	1372.4	1374.3
20°	1328.2	1329.9	1337.3	1354.0	1355.9
22.5°	1298.6	1304.1	1313.4	1329.9	1335.6
25°	1265.1	1272.5	1283.7	1306.0	1309.6
27.5°	1233.8	1239.3	1254.1	1278.2	1285.6
30°	1194.9	1204.2	1222.6	1246.7	1256.0
32.5°	1157.9	1167.2	1189.4	1215.2	1222.6
35°	1111.7	1124.7	1150.5	1180.1	1189.4
37.5°	1067.3	1080.2	1111.7	1145.0	1156.2
40°	1021.0	1035.8	1069.2	1107.9	1122.8
42.5°	971.1	991.4	1028.4	1070.9	1087.6
45°	921.1	939.7	985.9	1033.9	1052.5
47.5°	867.6	889.8	939.7	997.1	1019.3
50°	810.3	838.0	895.3	958.2	982.3
52.5°	752.9	784.3	849.0	919.2	945.2
55°	697.3	726.9	804.6	880.5	908.2
57.5°	636.4	673.4	758.4	839.7	867.6
60°	573.3	614.2	712.1	797.2	826.8
62.5°	510.5	556.8	667.7	752.9	784.3
65°	447.7	499.5	616.1	706.6	738.1
67.5°	386.5	443.9	567.8	658.6	689.9
70°	316.3	388.4	516.0	604.9	636.4
72.5°	251.5	334.9	466.1	549.4	577.1
75°	194.2	283.1	410.6	486.4	497.6
77.5°	142.4	231.2	353.3	379.1	381.0
80°	96.3	184.9	270.2	266.4	270.2
82.5°	62.8	138.8	170.1	190.6	192.3
85°	37.0	81.4	99.9	111.1	112.8
87.5°	18.4	27.7	35.1	37.0	40.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)