

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: P474186

Luminaire Tested: **24CZ2-55VHE-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474186
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55VHE-RDP-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3558.6 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

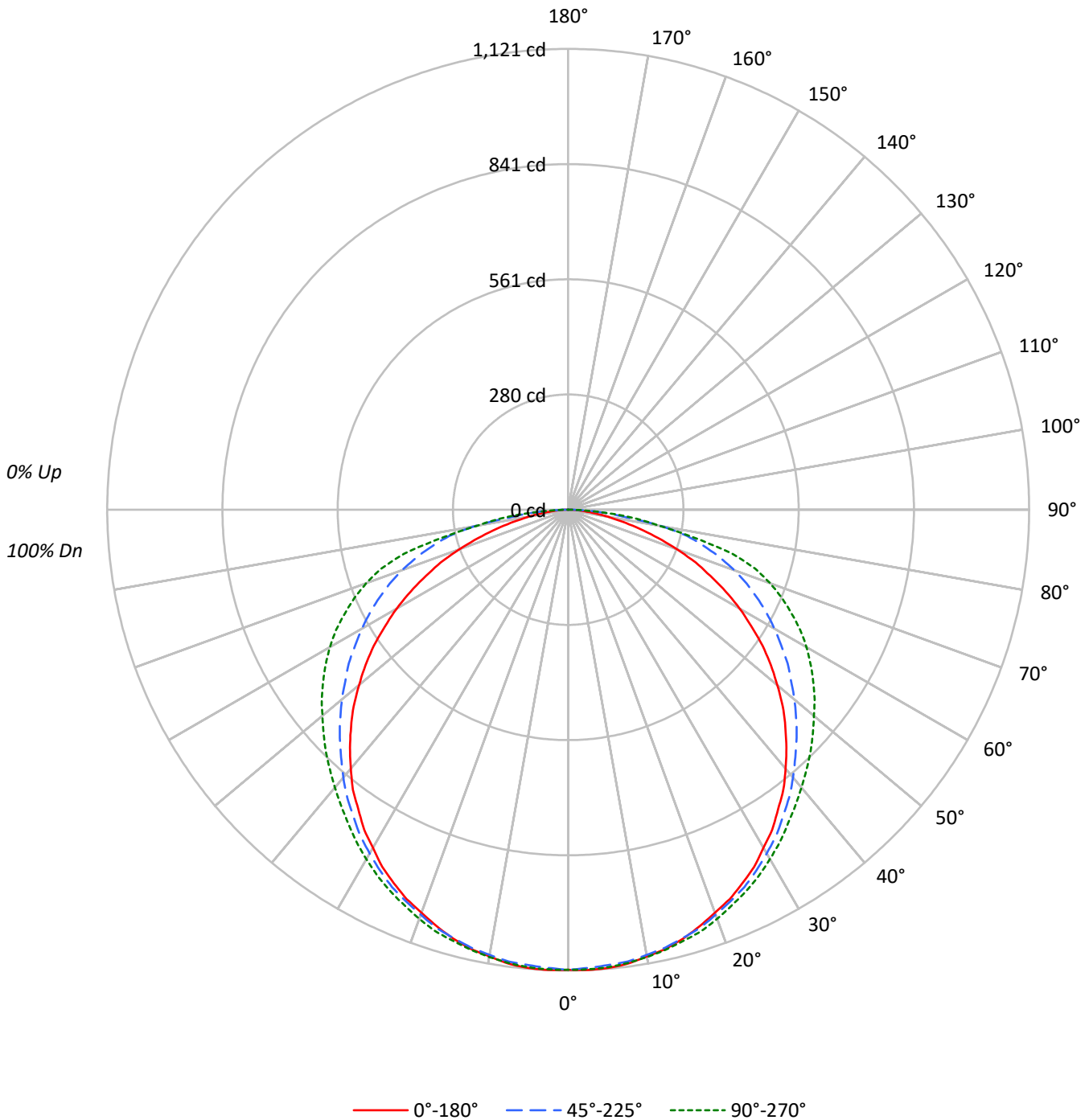
Input Watts (W): 37.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	93	89		92	89	87		88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1506	1506	1506
5°	1512	1502	1509
10°	1507	1502	1510
15°	1505	1502	1512
20°	1494	1501	1516
25°	1488	1504	1520
30°	1475	1500	1525
35°	1461	1496	1531
40°	1445	1494	1550
45°	1421	1495	1585
50°	1389	1504	1633
55°	1354	1528	1706
60°	1297	1558	1800
65°	1214	1613	1911
70°	1104	1688	2055
75°	936	1780	2148
80°	739	1791	1736
85°	545	1363	1527



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	3.0
10°-20°	305.5	8.6
20°-30°	467.2	13.1
30°-40°	571.1	16.0
40°-50°	608.7	17.1
50°-60°	582.0	16.4
60°-70°	493.0	13.9
70°-80°	331.4	9.3
80°-90°	93.5	2.6
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°	878.9	24.7
0°-40°	1450.0	40.7
0°-60°	2640.7	74.2
0°-90°	3558.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3558.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1119	1117	1112	1117	1117	106
15°	1080	1080	1078	1087	1086	305
25°	1003	1006	1013	1022	1024	462
35°	890	897	911	928	932	557
45°	747	759	786	819	833	576
55°	577	598	651	702	727	514
65°	381	420	506	574	600	379
75°	180	245	342	401	413	193
85°	35	72	88	95	99	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1119.2	1119.2	1119.2	1119.2	1119.2
2.5°	1120.9	1120.9	1115.6	1119.2	1119.2
5°	1119.2	1117.4	1112.1	1117.4	1117.4
7.5°	1113.9	1112.1	1108.6	1113.9	1112.1
10°	1103.3	1103.3	1099.7	1105.0	1105.0
12.5°	1094.4	1092.7	1090.9	1098.0	1096.2
15°	1080.3	1080.3	1078.5	1087.4	1085.6
17.5°	1062.6	1064.4	1066.2	1073.2	1075.0
20°	1043.2	1046.7	1048.5	1059.1	1059.1
22.5°	1025.6	1027.3	1030.8	1041.4	1041.4
25°	1002.6	1006.1	1013.2	1022.0	1023.8
27.5°	979.6	981.4	990.2	1002.6	1004.4
30°	949.6	954.9	965.5	979.6	981.4
32.5°	923.1	928.4	940.8	954.9	958.4
35°	889.6	896.6	910.8	928.4	931.9
37.5°	859.5	864.8	882.5	901.9	907.2
40°	822.6	833.1	850.7	873.7	882.5
42.5°	785.5	796.1	817.3	847.2	857.8
45°	746.7	759.1	785.5	819.1	833.1
47.5°	707.8	722.0	752.0	790.8	806.7
50°	663.7	681.3	718.4	762.6	780.2
52.5°	621.3	642.5	683.1	732.6	755.5
55°	577.1	598.3	651.3	702.5	727.3
57.5°	527.7	556.0	614.2	672.5	699.0
60°	482.0	508.3	578.9	642.5	669.0
62.5°	432.5	467.8	543.6	610.7	637.2
65°	381.3	420.1	506.5	573.6	600.1
67.5°	335.4	377.8	469.6	536.5	563.0
70°	280.6	333.6	429.0	495.9	522.4
72.5°	229.4	287.7	386.6	451.9	476.7
75°	180.0	245.3	342.4	400.7	413.1
77.5°	134.2	202.9	296.5	321.2	312.4
80°	95.4	162.5	231.2	218.8	224.1
82.5°	61.8	123.6	143.1	162.5	167.6
85°	35.3	72.4	88.3	95.4	98.9
87.5°	15.9	26.5	35.3	35.3	33.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)