

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: P474374

Luminaire Tested: **24CZ2-55HE-HRP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474374
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-HRP-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ HRP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4473.3 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

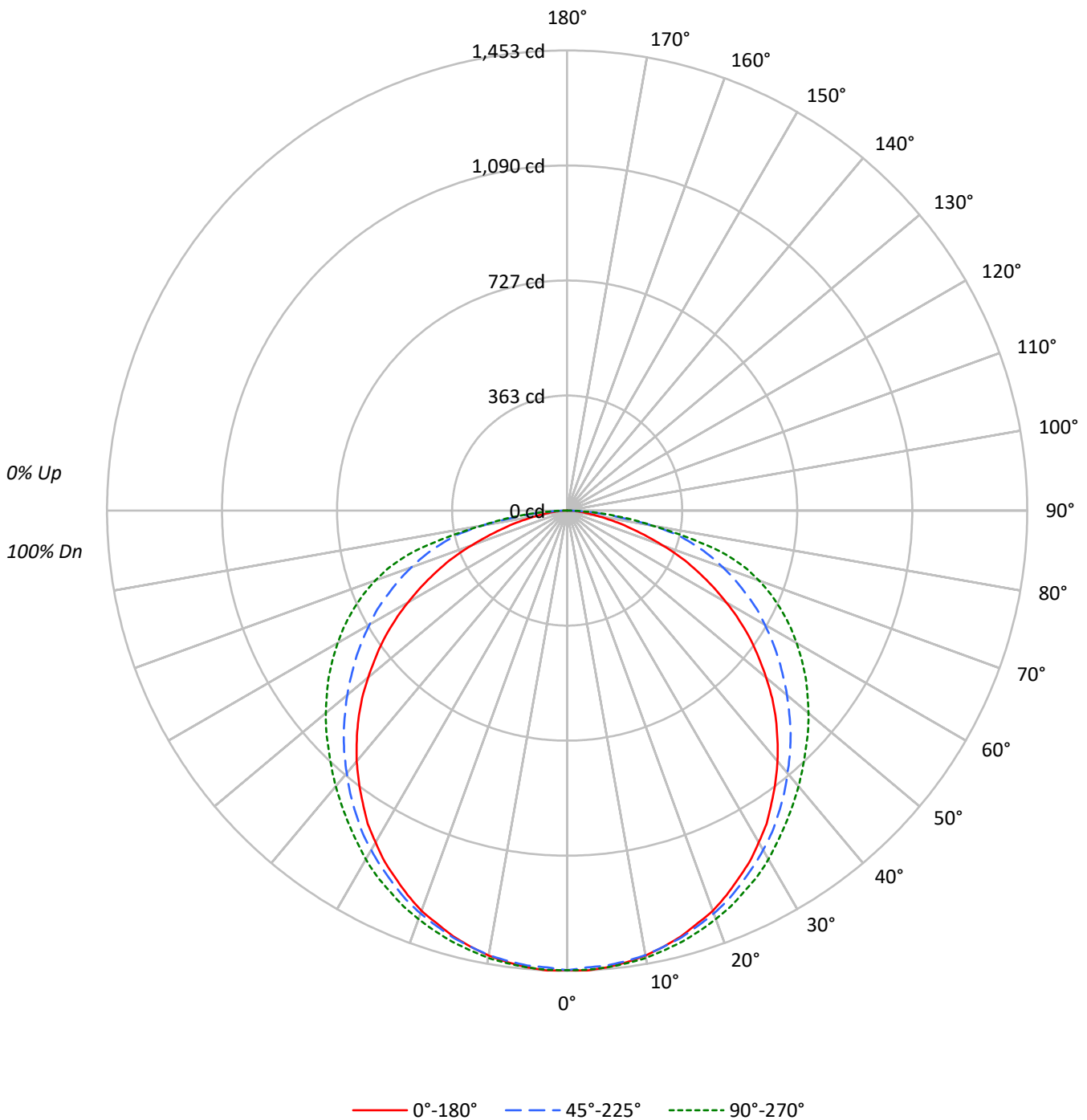
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1953	1953	1953
5°	1955	1947	1955
10°	1949	1947	1960
15°	1938	1943	1962
20°	1925	1939	1965
25°	1902	1930	1968
30°	1879	1923	1976
35°	1849	1913	1978
40°	1816	1901	1997
45°	1775	1899	2028
50°	1717	1897	2082
55°	1656	1911	2157
60°	1562	1940	2253
65°	1443	1986	2379
70°	1260	2055	2535
75°	1022	2161	2619
80°	755	2119	2119
85°	579	1561	1763



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.5	3.1
10°-20°	394.8	8.8
20°-30°	601.1	13.4
30°-40°	729.8	16.3
40°-50°	771.1	17.2
50°-60°	727.6	16.3
60°-70°	605.0	13.5
70°-80°	398.0	8.9
80°-90°	108.5	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°	1133.4	25.3
0°-40°	1863.2	41.7
0°-60°	3361.8	75.2
0°-90°	4473.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4473.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1451	1451	1451	1451	1451	
5°	1448	1448	1442	1448	1448	137
15°	1391	1393	1395	1408	1408	392
25°	1281	1288	1300	1322	1326	591
35°	1126	1139	1165	1195	1204	705
45°	933	951	998	1047	1066	718
55°	706	736	815	891	920	629
65°	453	506	624	715	747	448
75°	197	287	416	492	504	212
85°	38	82	101	112	114	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1451.3	1451.3	1451.3	1451.3	1451.3
2.5°	1453.3	1451.3	1443.8	1451.3	1451.3
5°	1447.7	1447.7	1441.9	1447.7	1447.7
7.5°	1438.3	1438.3	1434.4	1441.9	1441.9
10°	1426.9	1426.9	1425.2	1434.4	1434.4
12.5°	1410.2	1411.9	1410.2	1421.4	1421.4
15°	1391.4	1393.3	1395.2	1408.3	1408.3
17.5°	1367.2	1370.8	1374.6	1389.4	1391.4
20°	1344.7	1346.4	1353.9	1370.8	1372.7
22.5°	1314.7	1320.3	1329.7	1346.4	1352.2
25°	1280.9	1288.3	1299.7	1322.2	1325.8
27.5°	1249.1	1254.7	1269.7	1294.1	1301.6
30°	1209.7	1219.2	1237.8	1262.2	1271.6
32.5°	1172.3	1181.7	1204.2	1230.3	1237.8
35°	1125.6	1138.6	1164.8	1194.7	1204.2
37.5°	1080.6	1093.6	1125.6	1159.2	1170.5
40°	1033.7	1048.7	1082.5	1121.7	1136.7
42.5°	983.1	1003.7	1041.2	1084.2	1101.1
45°	932.6	951.4	998.1	1046.7	1065.6
47.5°	878.4	900.9	951.4	1009.5	1031.9
50°	820.3	848.4	906.4	970.1	994.5
52.5°	762.3	794.0	859.5	930.7	957.0
55°	706.0	736.0	814.6	891.4	919.5
57.5°	644.3	681.7	767.9	850.1	878.4
60°	580.5	621.8	721.0	807.1	837.1
62.5°	516.8	563.7	676.0	762.3	794.0
65°	453.2	505.7	623.7	715.4	747.3
67.5°	391.3	449.4	574.9	666.8	698.5
70°	320.2	393.3	522.4	612.4	644.3
72.5°	254.7	339.0	471.9	556.2	584.3
75°	196.6	286.6	415.7	492.4	503.8
77.5°	144.2	234.1	357.7	383.8	385.8
80°	97.4	187.2	273.5	269.7	273.5
82.5°	63.6	140.5	172.2	193.0	194.7
85°	37.5	82.5	101.1	112.4	114.2
87.5°	18.6	28.1	35.6	37.5	41.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)