

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: P474178

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474178
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-RDP-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, 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: 5034.8 lumens
Efficiency: N/A
Efficacy: 90.9 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

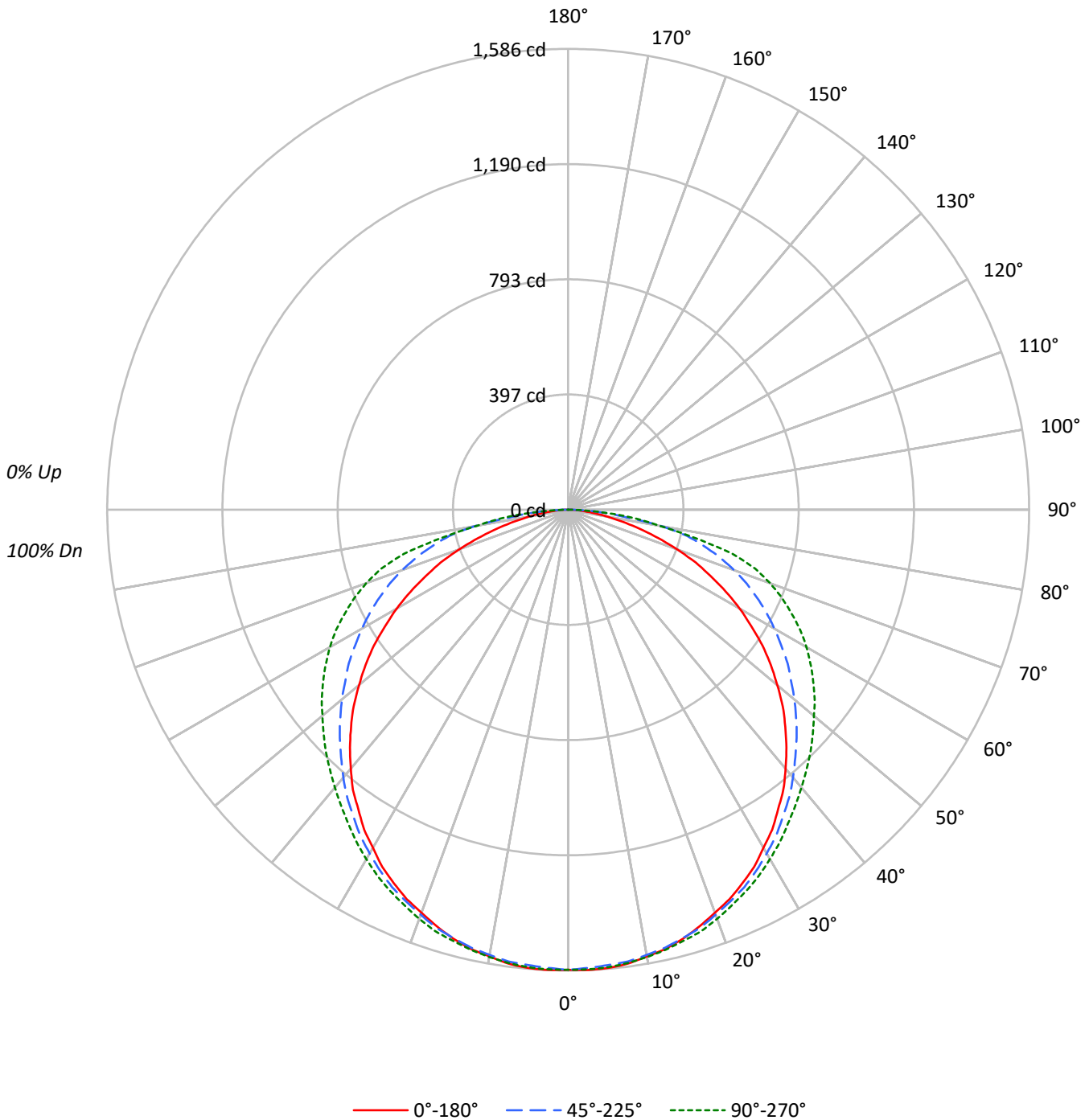
Input Watts (W): 55.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P474178

CATALOG NUMBER: 24CZ2-75HE-RDP-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474178

CATALOG NUMBER: 24CZ2-75HE-RDP-UNV-L830-CD1-U

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°	2130	2130	2130
5°	2139	2125	2135
10°	2133	2126	2136
15°	2129	2126	2139
20°	2113	2124	2145
25°	2106	2128	2150
30°	2087	2122	2157
35°	2067	2116	2166
40°	2044	2114	2193
45°	2010	2115	2243
50°	1966	2128	2311
55°	1915	2162	2414
60°	1835	2204	2547
65°	1717	2281	2703
70°	1562	2388	2908
75°	1324	2519	3038
80°	1045	2534	2457
85°	772	1928	2160



TEST NUMBER: P474178

CATALOG NUMBER: 24CZ2-75HE-RDP-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.2	3.0
10°-20°	432.3	8.6
20°-30°	661.0	13.1
30°-40°	808.0	16.0
40°-50°	861.3	17.1
50°-60°	823.4	16.4
60°-70°	697.5	13.9
70°-80°	468.8	9.3
80°-90°	132.3	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°	1243.4	24.7
0°-40°	2051.5	40.7
0°-60°	3736.1	74.2
0°-90°	5034.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5034.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1583	1581	1573	1581	1581	150
15°	1528	1528	1526	1538	1536	431
25°	1418	1424	1433	1446	1448	654
35°	1258	1268	1288	1314	1318	788
45°	1056	1074	1111	1159	1179	815
55°	816	846	922	994	1029	727
65°	539	594	717	812	849	536
75°	255	347	484	567	584	273
85°	50	102	125	135	140	62
90°	0	0	0	0	0	



TEST NUMBER: P474178

CATALOG NUMBER: 24CZ2-75HE-RDP-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1583.4	1583.4	1583.4	1583.4	1583.4
2.5°	1585.9	1585.9	1578.4	1583.4	1583.4
5°	1583.4	1580.9	1573.4	1580.9	1580.9
7.5°	1575.9	1573.4	1568.4	1575.9	1573.4
10°	1560.9	1560.9	1555.9	1563.4	1563.4
12.5°	1548.4	1545.9	1543.4	1553.4	1550.9
15°	1528.4	1528.4	1525.9	1538.4	1535.9
17.5°	1503.4	1505.9	1508.4	1518.4	1520.9
20°	1475.9	1480.9	1483.4	1498.4	1498.4
22.5°	1450.9	1453.4	1458.4	1473.4	1473.4
25°	1418.5	1423.5	1433.4	1445.9	1448.4
27.5°	1386.0	1388.5	1401.0	1418.5	1421.0
30°	1343.5	1351.0	1366.0	1386.0	1388.5
32.5°	1306.0	1313.5	1331.0	1351.0	1356.0
35°	1258.5	1268.5	1288.5	1313.5	1318.5
37.5°	1216.1	1223.6	1248.6	1276.0	1283.5
40°	1163.8	1178.6	1203.6	1236.1	1248.6
42.5°	1111.4	1126.4	1156.4	1198.6	1213.6
45°	1056.4	1073.9	1111.4	1158.9	1178.6
47.5°	1001.4	1021.4	1063.9	1118.9	1141.4
50°	939.0	964.0	1016.4	1078.9	1103.9
52.5°	879.0	909.0	966.5	1036.4	1068.9
55°	816.5	846.5	921.5	993.9	1028.9
57.5°	746.6	786.6	869.0	951.5	988.9
60°	681.9	719.1	819.0	909.0	946.5
62.5°	611.9	661.9	769.1	864.0	901.5
65°	539.4	594.4	716.6	811.5	849.0
67.5°	474.5	534.5	664.4	759.1	796.6
70°	397.0	472.0	606.9	701.6	739.1
72.5°	324.6	407.0	546.9	639.4	674.4
75°	254.6	347.1	484.5	566.9	584.4
77.5°	189.9	287.1	419.5	454.5	442.0
80°	134.9	229.9	327.1	309.6	317.1
82.5°	87.5	174.9	202.4	229.9	237.1
85°	50.0	102.4	124.9	134.9	139.9
87.5°	22.5	37.5	50.0	50.0	47.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)