

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: P474444

Luminaire Tested: **24CZ2-100VHE-HRP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474444
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-100VHE-HRP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY 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: 8107.6 lumens
Efficiency: N/A
Efficacy: 114.0 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

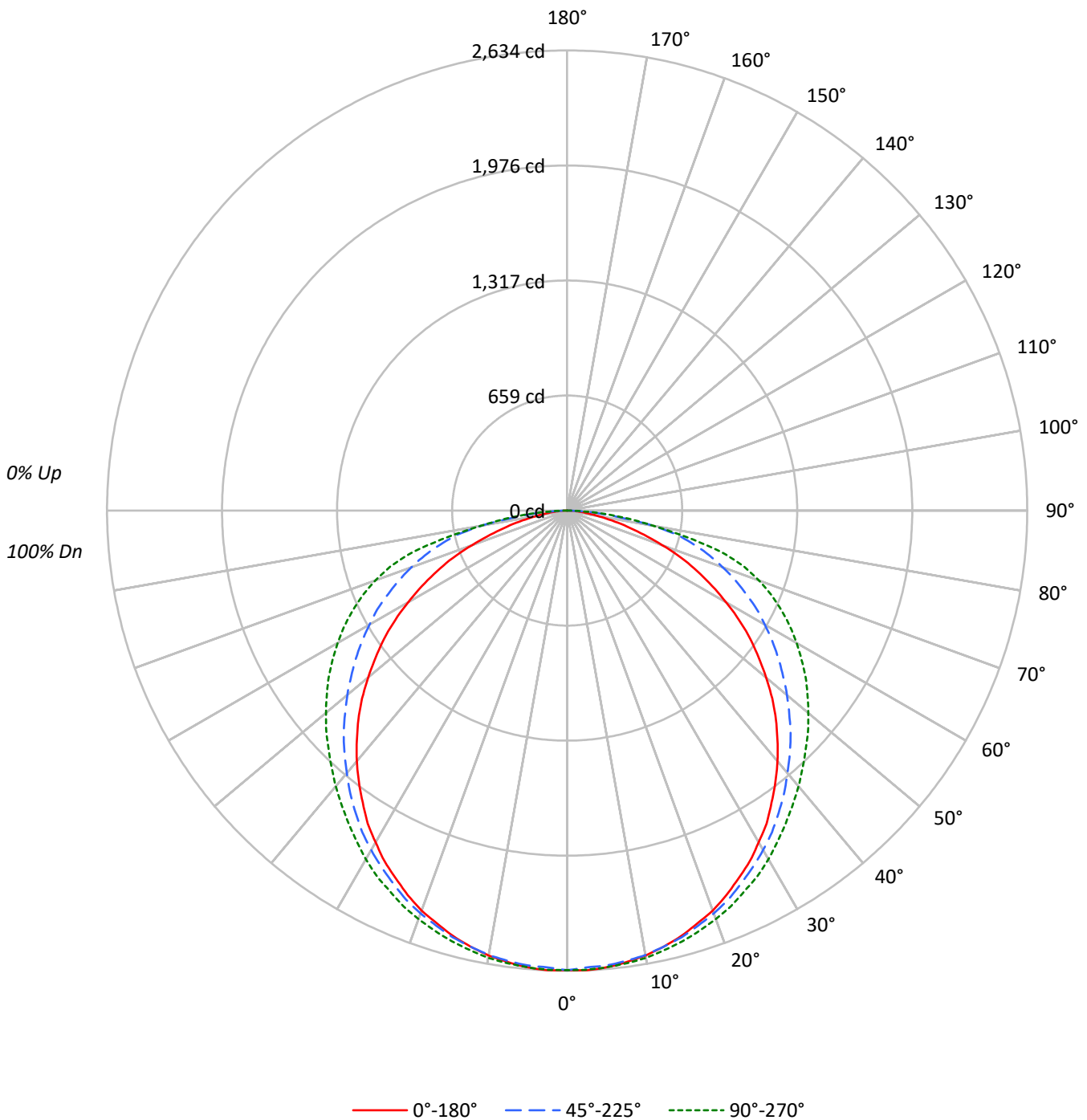
Input Watts (W): 71.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3539	3539	3539
5°	3544	3530	3544
10°	3534	3529	3552
15°	3513	3522	3556
20°	3490	3514	3562
25°	3446	3497	3567
30°	3407	3486	3581
35°	3351	3468	3585
40°	3291	3446	3619
45°	3216	3442	3675
50°	3112	3439	3773
55°	3001	3463	3909
60°	2831	3516	4082
65°	2615	3599	4312
70°	2283	3725	4594
75°	1853	3917	4747
80°	1368	3841	3841
85°	1048	2828	3194



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.2	3.1
10°-20°	715.6	8.8
20°-30°	1089.4	13.4
30°-40°	1322.8	16.3
40°-50°	1397.5	17.2
50°-60°	1318.7	16.3
60°-70°	1096.5	13.5
70°-80°	721.4	8.9
80°-90°	196.6	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°	2054.2	25.3
0°-40°	3376.9	41.7
0°-60°	6093.2	75.2
0°-90°	8107.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8107.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2630	2630	2630	2630	2630	
5°	2624	2624	2613	2624	2624	249
15°	2522	2525	2529	2552	2552	711
25°	2322	2335	2356	2396	2403	1071
35°	2040	2064	2111	2165	2182	1277
45°	1690	1724	1809	1897	1931	1302
55°	1280	1334	1476	1616	1667	1140
65°	821	917	1130	1297	1354	812
75°	356	519	754	892	913	384
85°	68	149	183	204	207	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2630.5	2630.5	2630.5	2630.5	2630.5
2.5°	2634.0	2630.5	2616.9	2630.5	2630.5
5°	2623.9	2623.9	2613.4	2623.9	2623.9
7.5°	2606.8	2606.8	2599.9	2613.4	2613.4
10°	2586.3	2586.3	2583.1	2599.9	2599.9
12.5°	2556.0	2559.1	2556.0	2576.2	2576.2
15°	2521.8	2525.3	2528.8	2552.5	2552.5
17.5°	2477.9	2484.5	2491.5	2518.3	2521.8
20°	2437.2	2440.3	2453.9	2484.5	2488.0
22.5°	2382.8	2392.9	2410.0	2440.3	2450.8
25°	2321.5	2335.1	2355.7	2396.4	2403.0
27.5°	2264.0	2274.1	2301.3	2345.5	2359.1
30°	2192.6	2209.7	2243.5	2287.7	2304.8
32.5°	2124.7	2141.8	2182.5	2229.9	2243.5
35°	2040.0	2063.7	2111.1	2165.4	2182.5
37.5°	1958.5	1982.2	2040.0	2101.0	2121.5
40°	1873.5	1900.7	1962.0	2033.1	2060.2
42.5°	1781.9	1819.2	1887.1	1965.1	1995.8
45°	1690.3	1724.4	1809.1	1897.2	1931.3
47.5°	1592.0	1632.8	1724.4	1829.6	1870.4
50°	1486.8	1537.7	1642.9	1758.2	1802.4
52.5°	1381.6	1439.1	1557.9	1686.8	1734.5
55°	1279.5	1333.9	1476.4	1615.7	1666.6
57.5°	1167.7	1235.7	1391.7	1540.8	1592.0
60°	1052.1	1127.0	1306.7	1462.8	1517.1
62.5°	936.8	1021.8	1225.2	1381.6	1439.1
65°	821.4	916.6	1130.4	1296.6	1354.4
67.5°	709.3	814.5	1042.0	1208.5	1266.0
70°	580.4	712.8	946.9	1109.9	1167.7
72.5°	461.6	614.5	855.2	1008.2	1059.0
75°	356.4	519.4	753.5	892.5	913.1
77.5°	261.3	424.3	648.3	695.7	699.2
80°	176.6	339.3	495.7	488.8	495.7
82.5°	115.3	254.7	312.1	349.8	352.9
85°	67.9	149.4	183.2	203.8	206.9
87.5°	33.8	50.9	64.4	67.9	74.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)