

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: P276313

Luminaire Tested: **24CZ2-30HE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276313
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30HE-S-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3052.0 lumens
Efficiency: N/A
Efficacy: 155.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

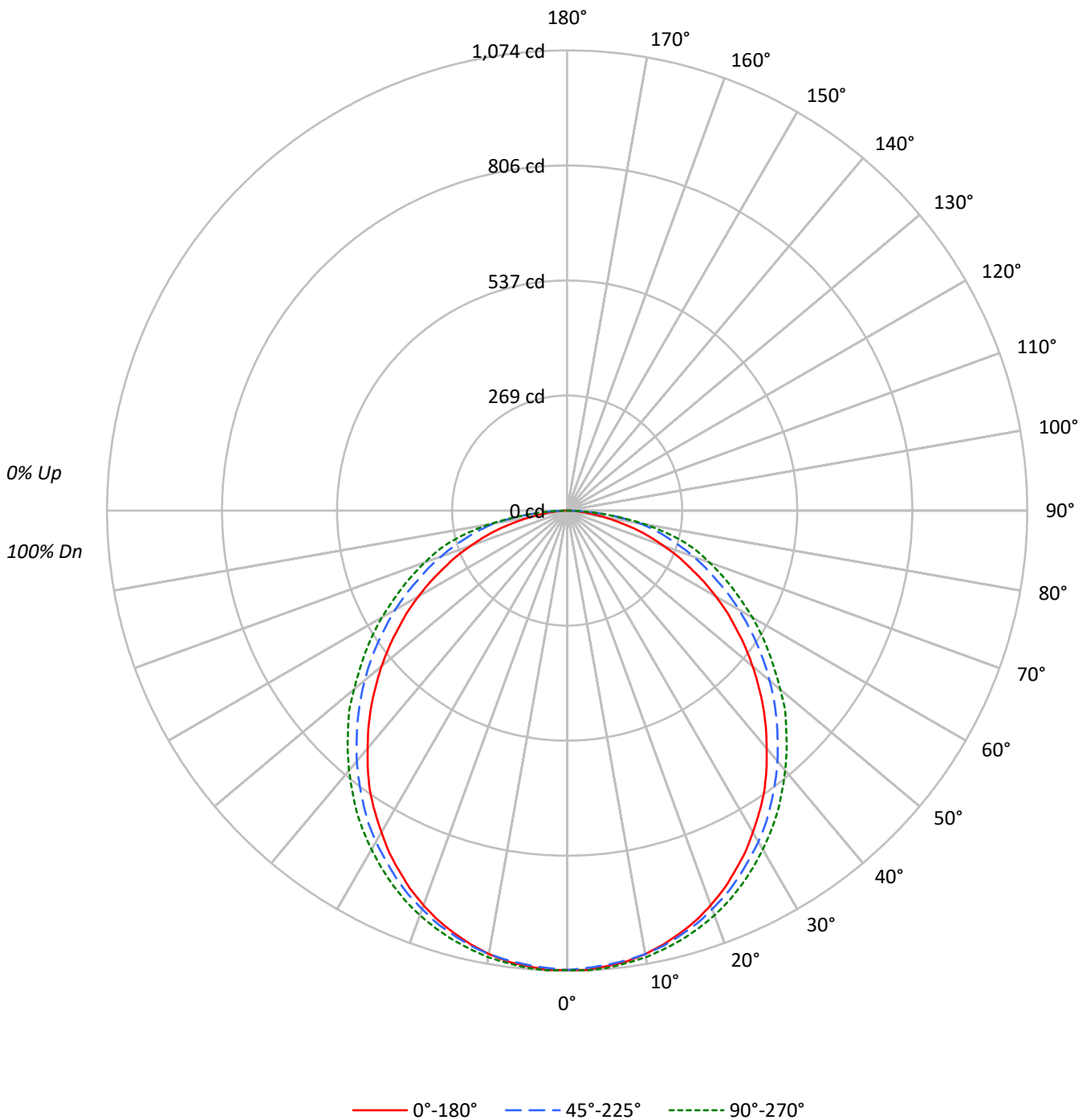
Input Watts (W): 19.623
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1443	1443	1443
5°	1442	1438	1447
10°	1436	1436	1446
15°	1422	1429	1444
20°	1403	1417	1439
25°	1377	1403	1431
30°	1347	1387	1419
35°	1317	1365	1408
40°	1272	1342	1391
45°	1230	1315	1376
50°	1183	1291	1360
55°	1130	1267	1346
60°	1077	1247	1344
65°	1009	1225	1352
70°	934	1232	1388
75°	836	1255	1467
80°	676	1330	1435
85°	509	1167	1138



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.5	3.3
10°-20°	290.0	9.5
20°-30°	436.0	14.3
30°-40°	519.3	17.0
40°-50°	531.5	17.4
50°-60°	478.5	15.7
60°-70°	375.8	12.3
70°-80°	243.9	8.0
80°-90°	75.4	2.5
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°	827.5	27.1
0°-40°	1346.9	44.1
0°-60°	2356.9	77.2
0°-90°	3052.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3052.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1067	1069	1064	1070	1071	101
15°	1021	1024	1026	1034	1036	288
25°	928	936	945	961	964	427
35°	802	811	831	851	857	500
45°	647	662	691	717	723	499
55°	482	503	540	568	574	432
65°	317	341	385	417	425	316
75°	161	192	241	274	282	170
85°	33	61	76	74	74	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1072.2	1072.2	1072.2	1072.2	1072.2
2.5°	1073.2	1073.2	1068.3	1073.2	1074.1
5°	1067.3	1069.3	1064.4	1070.2	1071.2
7.5°	1061.5	1061.5	1058.6	1064.4	1065.4
10°	1050.9	1051.8	1050.9	1057.6	1058.6
12.5°	1037.3	1039.2	1040.2	1047.0	1048.0
15°	1020.8	1023.7	1025.7	1034.4	1036.3
17.5°	1002.4	1005.3	1010.1	1019.8	1021.8
20°	980.1	984.0	989.8	1002.4	1005.3
22.5°	955.9	959.7	969.4	981.1	985.9
25°	927.7	935.5	945.2	960.7	963.6
27.5°	899.6	906.4	919.0	935.5	939.4
30°	866.7	877.3	892.8	909.3	913.2
32.5°	834.7	845.3	863.8	881.2	886.1
35°	801.7	811.4	830.8	851.2	857.0
37.5°	763.9	776.5	797.8	818.2	824.0
40°	724.2	739.7	763.9	785.2	792.0
42.5°	686.4	702.8	727.1	750.3	758.1
45°	646.6	662.1	691.2	717.4	723.2
47.5°	605.9	623.3	654.4	680.5	690.2
50°	565.2	583.6	616.6	643.7	649.5
52.5°	524.5	543.8	578.7	607.8	610.7
55°	481.8	503.1	540.0	568.1	573.9
57.5°	443.0	461.4	501.2	530.3	537.1
60°	400.4	420.7	463.4	490.5	499.3
62.5°	359.7	381.0	425.6	452.7	460.5
65°	317.0	341.2	384.9	416.9	424.6
67.5°	280.2	303.4	350.0	381.0	388.7
70°	237.5	263.7	313.1	345.1	352.9
72.5°	200.7	227.8	277.3	308.3	319.9
75°	160.9	191.9	241.4	274.3	282.1
77.5°	122.1	158.0	208.4	233.6	233.6
80°	87.2	125.1	171.6	183.2	185.2
82.5°	57.2	94.0	127.0	126.0	126.0
85°	33.0	61.1	75.6	73.7	73.7
87.5°	12.6	25.2	27.1	27.1	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)