

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: P276463

Luminaire Tested: **24CZ2-30HE-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276463
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-L82765-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2880.6 lumens
Efficiency: N/A
Efficacy: 147.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

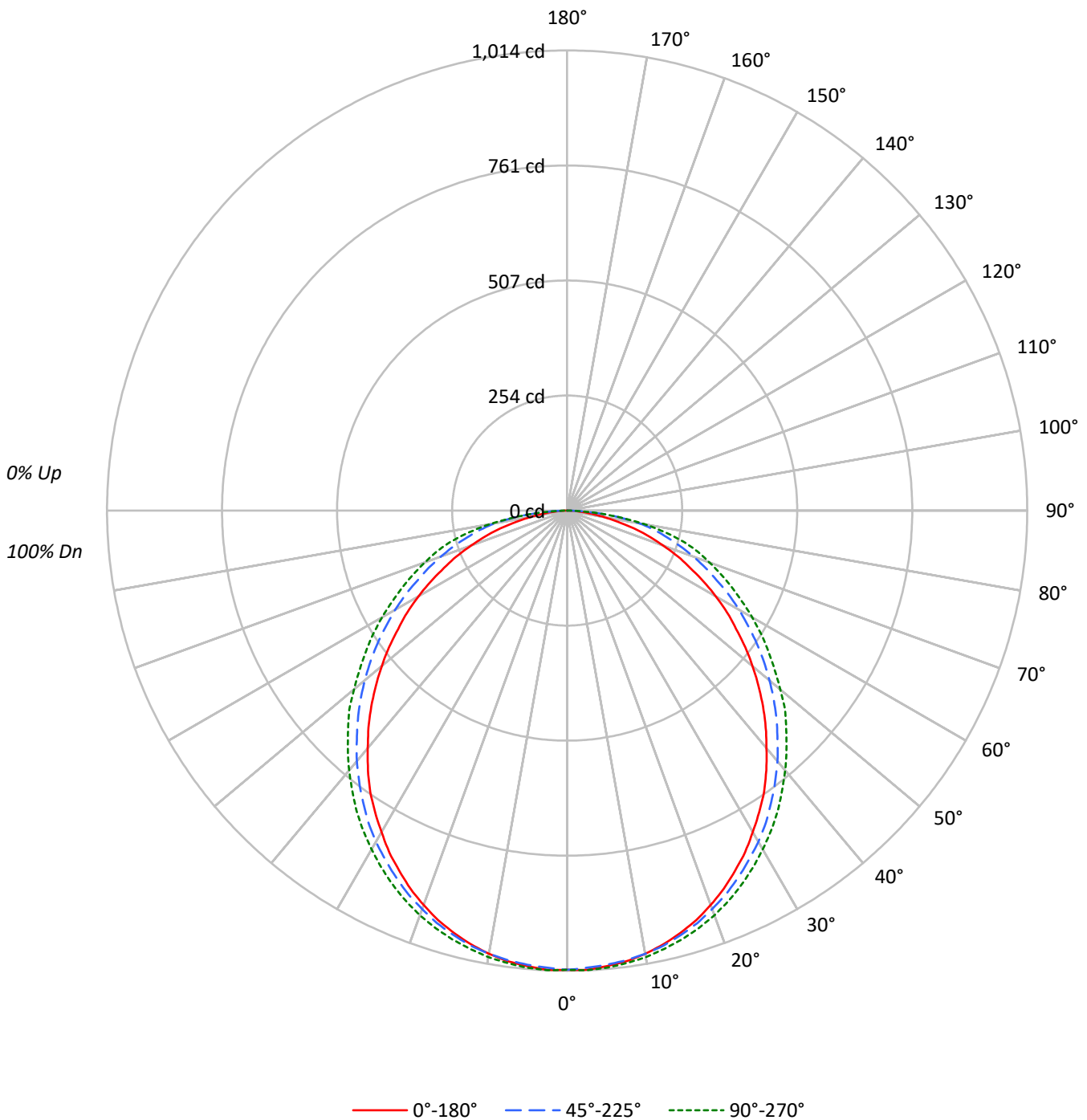
Input Watts (W): 19.53
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1362	1362	1362
5°	1361	1357	1366
10°	1355	1355	1365
15°	1342	1349	1362
20°	1324	1338	1359
25°	1300	1324	1350
30°	1271	1309	1339
35°	1243	1288	1328
40°	1201	1266	1313
45°	1161	1241	1299
50°	1117	1218	1283
55°	1067	1195	1271
60°	1017	1177	1268
65°	953	1156	1276
70°	882	1162	1310
75°	790	1184	1384
80°	638	1255	1354
85°	480	1102	1073



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.8	3.3
10°-20°	273.7	9.5
20°-30°	411.5	14.3
30°-40°	490.2	17.0
40°-50°	501.7	17.4
50°-60°	451.6	15.7
60°-70°	354.7	12.3
70°-80°	230.2	8.0
80°-90°	71.2	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°	781.1	27.1
0°-40°	1271.2	44.1
0°-60°	2224.5	77.2
0°-90°	2880.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2880.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1012	1012	1012	1012	1012	
5°	1007	1009	1005	1010	1011	96
15°	964	966	968	976	978	272
25°	876	883	892	907	910	403
35°	757	766	784	803	809	472
45°	610	625	652	677	683	471
55°	455	475	510	536	542	408
65°	299	322	363	393	401	298
75°	152	181	228	259	266	161
85°	31	58	71	70	70	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1012.0	1012.0	1012.0	1012.0	1012.0
2.5°	1012.9	1012.9	1008.3	1012.9	1013.8
5°	1007.4	1009.2	1004.7	1010.1	1011.1
7.5°	1001.9	1001.9	999.2	1004.7	1005.6
10°	991.8	992.8	991.8	998.2	999.2
12.5°	979.0	980.9	981.8	988.2	989.1
15°	963.5	966.2	968.1	976.3	978.1
17.5°	946.1	948.8	953.4	962.6	964.4
20°	925.0	928.7	934.2	946.1	948.8
22.5°	902.2	905.8	915.0	926.0	930.5
25°	875.6	883.0	892.1	906.7	909.5
27.5°	849.1	855.5	867.4	883.0	886.6
30°	818.0	828.1	842.7	858.3	861.9
32.5°	787.8	797.9	815.3	831.7	836.3
35°	756.7	765.8	784.1	803.4	808.8
37.5°	721.0	732.9	753.0	772.2	777.7
40°	683.5	698.1	721.0	741.1	747.5
42.5°	647.8	663.4	686.2	708.2	715.5
45°	610.3	624.9	652.4	677.1	682.6
47.5°	571.9	588.3	617.6	642.3	651.5
50°	533.4	550.8	581.9	607.5	613.0
52.5°	495.0	513.3	546.2	573.7	576.4
55°	454.7	474.9	509.6	536.2	541.7
57.5°	418.1	435.5	473.0	500.5	506.9
60°	377.9	397.1	437.4	463.0	471.2
62.5°	339.5	359.6	401.7	427.3	434.6
65°	299.2	322.1	363.2	393.4	400.8
67.5°	264.4	286.4	330.3	359.6	366.9
70°	224.2	248.9	295.5	325.7	333.1
72.5°	189.4	215.0	261.7	291.0	301.9
75°	151.9	181.2	227.8	258.9	266.3
77.5°	115.3	149.1	196.7	220.5	220.5
80°	82.3	118.0	162.0	172.9	174.8
82.5°	54.0	88.8	119.9	118.9	118.9
85°	31.1	57.6	71.4	69.5	69.5
87.5°	11.9	23.8	25.6	25.6	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)