

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: P276312

Luminaire Tested: **24CZ2-30HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276312
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-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: 2884.0 lumens
Efficiency: N/A
Efficacy: 147.3 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

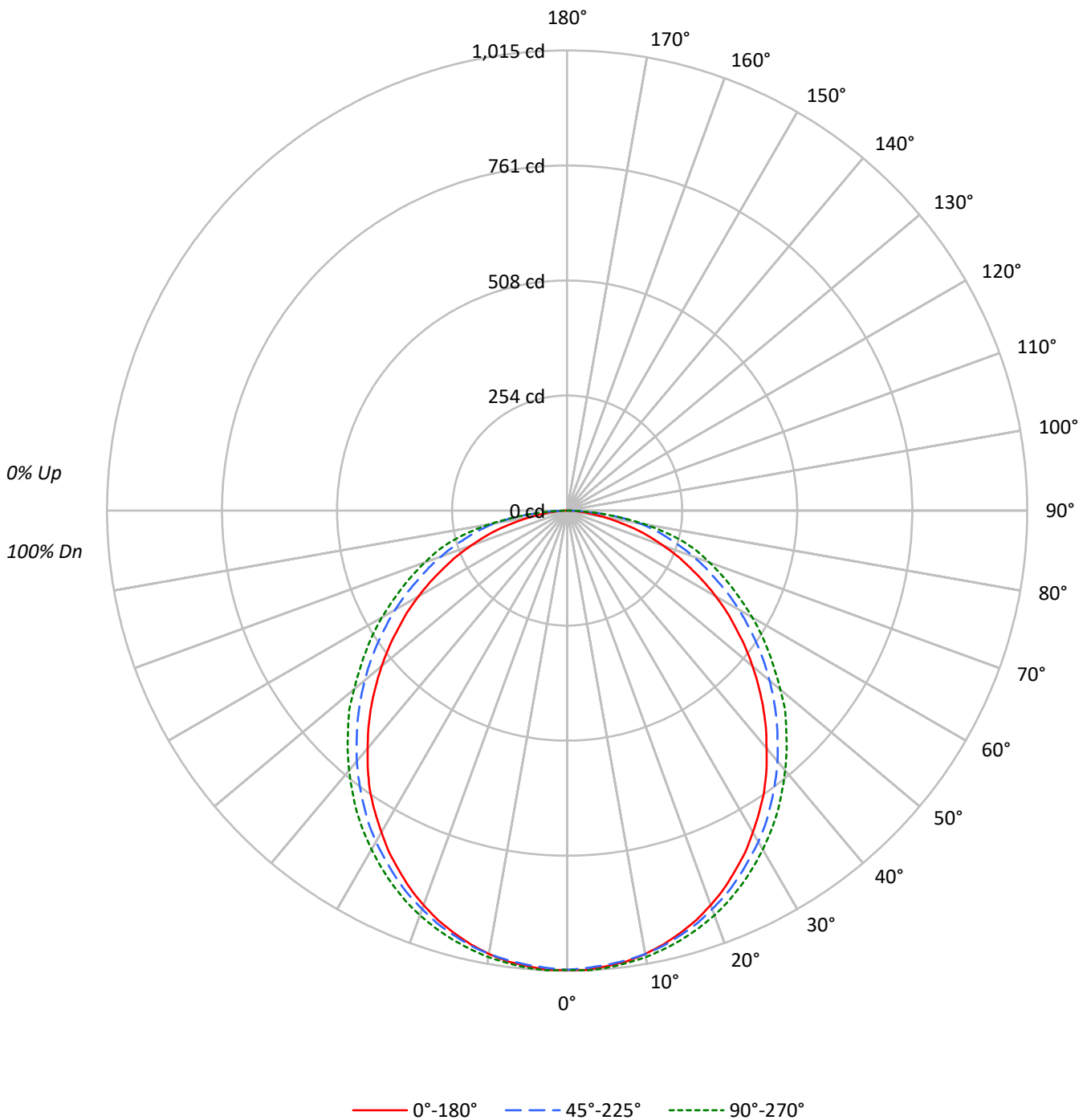
Input Watts (W): 19.583754
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1363	1363	1363
5°	1362	1358	1367
10°	1357	1357	1367
15°	1344	1350	1364
20°	1326	1339	1360
25°	1302	1326	1352
30°	1272	1311	1341
35°	1244	1290	1330
40°	1202	1268	1314
45°	1163	1243	1300
50°	1118	1220	1285
55°	1068	1197	1272
60°	1018	1178	1270
65°	954	1158	1277
70°	883	1164	1312
75°	791	1186	1386
80°	638	1256	1356
85°	480	1104	1074



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.9	3.3
10°-20°	274.1	9.5
20°-30°	412.0	14.3
30°-40°	490.7	17.0
40°-50°	502.3	17.4
50°-60°	452.2	15.7
60°-70°	355.1	12.3
70°-80°	230.5	8.0
80°-90°	71.3	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°	782.0	27.1
0°-40°	1272.7	44.1
0°-60°	2227.1	77.2
0°-90°	2884.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2884.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1013	1013	1013	1013	1013	
5°	1009	1010	1006	1011	1012	96
15°	965	967	969	977	979	272
25°	877	884	893	908	911	404
35°	758	767	785	804	810	473
45°	611	626	653	678	683	471
55°	455	475	510	537	542	408
65°	300	322	364	394	401	298
75°	152	181	228	259	267	161
85°	31	58	72	70	70	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1013.2	1013.2	1013.2	1013.2	1013.2
2.5°	1014.1	1014.1	1009.5	1014.1	1015.0
5°	1008.6	1010.4	1005.8	1011.3	1012.3
7.5°	1003.1	1003.1	1000.3	1005.8	1006.8
10°	993.0	993.9	993.0	999.4	1000.3
12.5°	980.2	982.0	982.9	989.4	990.3
15°	964.6	967.4	969.2	977.4	979.3
17.5°	947.2	950.0	954.5	963.7	965.5
20°	926.1	929.8	935.3	947.2	950.0
22.5°	903.2	906.9	916.1	927.1	931.6
25°	876.7	884.0	893.2	907.8	910.6
27.5°	850.1	856.5	868.4	884.0	887.7
30°	819.0	829.0	843.7	859.3	862.9
32.5°	788.7	798.8	816.2	832.7	837.3
35°	757.6	766.7	785.1	804.3	809.8
37.5°	721.9	733.8	753.9	773.2	778.7
40°	684.3	699.0	721.9	742.0	748.4
42.5°	648.6	664.1	687.0	709.0	716.4
45°	611.0	625.7	653.2	677.9	683.4
47.5°	572.5	589.0	618.3	643.1	652.2
50°	534.1	551.5	582.6	608.3	613.8
52.5°	495.6	513.9	546.9	574.4	577.1
55°	455.3	475.4	510.2	536.8	542.3
57.5°	418.6	436.0	473.6	501.1	507.5
60°	378.3	397.6	437.9	463.5	471.8
62.5°	339.9	360.0	402.2	427.8	435.1
65°	299.6	322.5	363.7	393.9	401.2
67.5°	264.7	286.7	330.7	360.0	367.3
70°	224.4	249.2	295.9	326.1	333.4
72.5°	189.6	215.3	262.0	291.3	302.3
75°	152.1	181.4	228.1	259.2	266.6
77.5°	115.4	149.3	197.0	220.8	220.8
80°	82.4	118.2	162.1	173.1	175.0
82.5°	54.0	88.9	120.0	119.1	119.1
85°	31.1	57.7	71.5	69.6	69.6
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)