

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: P276184

Luminaire Tested: **24CZ2-30HE-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276184  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30HE-UNV-L92765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2737.7 lumens  
Efficiency: N/A  
Efficacy: 135.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

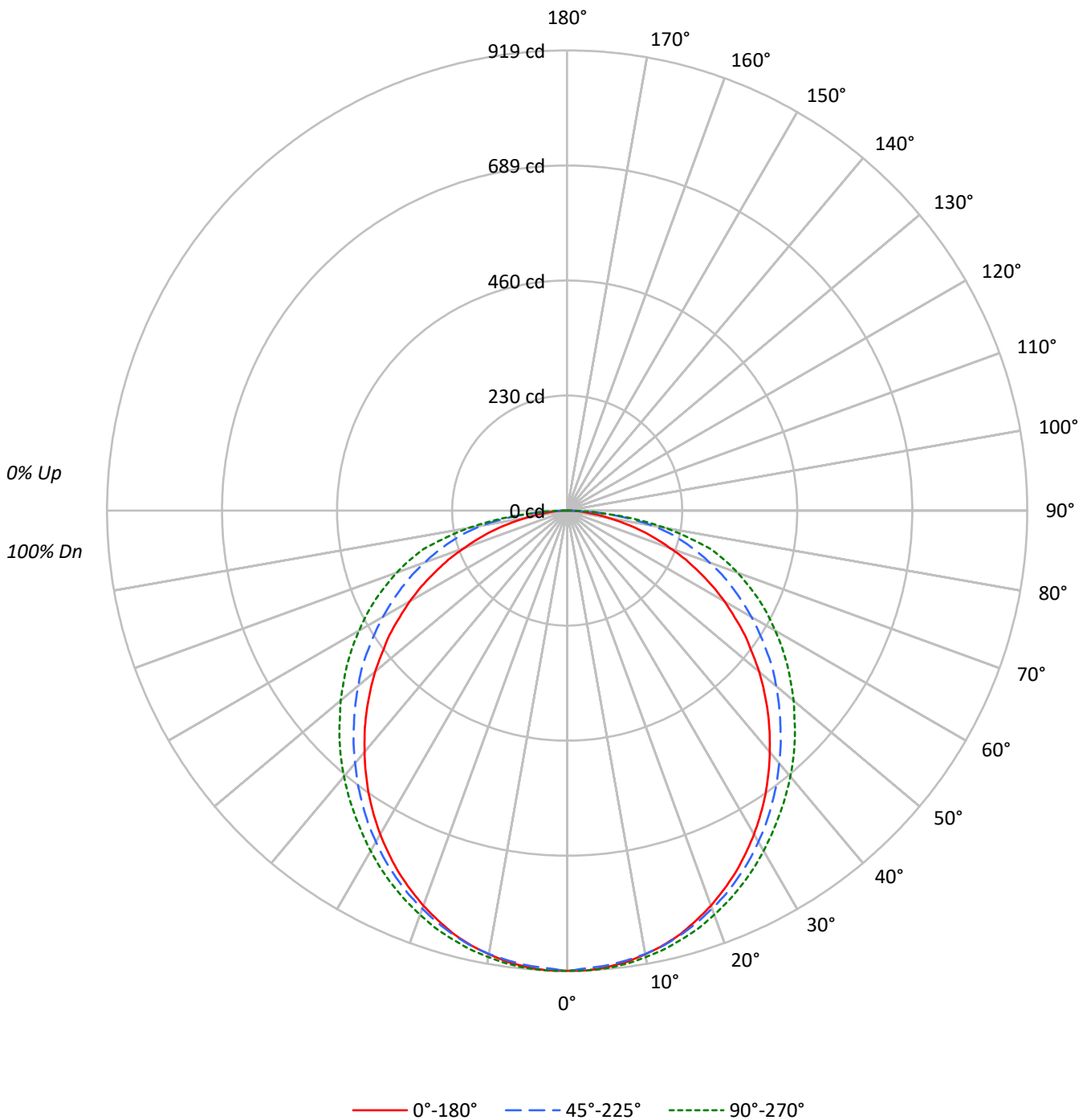
Input Watts (W): 20.181  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P276184

CATALOG NUMBER: 24CZ2-30HE-UNV-L92765-W2A1-U-5700K

### Luminous Intensity Polar Plot





TEST NUMBER: P276184

CATALOG NUMBER: 24CZ2-30HE-UNV-L92765-W2A1-U-5700K

**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	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1237	1237	1237
5°	1237	1232	1239
10°	1230	1228	1237
15°	1219	1222	1235
20°	1202	1211	1230
25°	1183	1200	1225
30°	1160	1187	1219
35°	1135	1172	1216
40°	1106	1157	1218
45°	1078	1146	1224
50°	1048	1140	1235
55°	1016	1138	1258
60°	976	1143	1291
65°	925	1161	1347
70°	859	1190	1423
75°	784	1249	1544
80°	644	1345	1543
85°	494	1241	1326



TEST NUMBER: P276184

CATALOG NUMBER: 24CZ2-30HE-UNV-L92765-W2A1-U-5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.9	3.2
10°-20°	248.2	9.1
20°-30°	373.5	13.6
30°-40°	447.6	16.3
40°-50°	466.4	17.0
50°-60°	433.9	15.9
60°-70°	357.4	13.1
70°-80°	243.4	8.9
80°-90°	80.4	2.9
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°	708.6	25.9
0°-40°	1156.2	42.2
0°-60°	2056.5	75.1
0°-90°	2737.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2737.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	919	919	919	919	919	
5°	916	916	912	916	917	87
15°	875	876	877	885	886	247
25°	797	800	809	822	825	367
35°	691	699	714	733	740	432
45°	566	578	602	632	643	437
55°	433	448	485	524	536	386
65°	291	315	365	408	423	288
75°	151	185	240	283	297	159
85°	32	62	80	86	86	40
90°	0	0	0	0	0	



TEST NUMBER: P276184

CATALOG NUMBER: 24CZ2-30HE-UNV-L92765-W2A1-U-5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	919.2	919.2	919.2	919.2	919.2
2.5°	919.2	919.2	914.6	919.2	919.2
5°	915.5	915.5	911.9	916.4	917.4
7.5°	909.1	910.0	906.4	911.9	912.8
10°	900.0	900.9	899.1	904.6	905.5
12.5°	889.0	889.9	889.9	896.3	897.3
15°	875.3	876.2	877.2	885.4	886.3
17.5°	858.0	860.7	862.5	872.6	874.4
20°	839.7	842.4	846.1	857.0	858.9
22.5°	818.7	822.3	828.7	840.6	843.3
25°	796.7	800.4	808.6	822.3	825.1
27.5°	772.1	777.6	787.6	802.2	805.9
30°	746.5	752.0	763.9	779.4	784.9
32.5°	719.1	726.4	740.1	757.5	762.9
35°	690.8	699.0	713.6	732.8	740.1
37.5°	660.6	669.7	687.1	708.1	717.3
40°	629.5	640.5	658.8	683.4	693.5
42.5°	598.5	608.5	631.4	657.9	668.8
45°	566.5	578.4	602.1	632.3	643.2
47.5°	533.6	545.5	573.8	605.8	615.8
50°	500.7	512.6	544.6	578.4	590.2
52.5°	465.1	480.6	517.2	551.0	562.8
55°	433.1	447.7	485.2	523.5	536.3
57.5°	396.5	413.9	455.0	495.2	508.9
60°	362.7	381.0	424.9	466.0	479.7
62.5°	328.0	348.1	394.7	436.7	452.3
65°	290.6	315.2	364.6	407.5	423.0
67.5°	256.7	282.3	334.4	378.3	392.0
70°	218.4	249.4	302.4	346.3	361.8
72.5°	185.5	216.5	272.3	315.2	330.8
75°	150.8	184.6	240.3	283.2	297.0
77.5°	116.0	153.5	209.2	242.1	246.7
80°	83.1	122.4	173.6	192.8	199.2
82.5°	58.5	94.1	127.9	140.7	144.4
85°	32.0	62.1	80.4	85.9	85.9
87.5°	13.7	26.5	32.0	32.9	33.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)