

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: P276464

Luminaire Tested: **24CZ2-30HE-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276464
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-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: 2980.0 lumens
Efficiency: N/A
Efficacy: 151.1 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

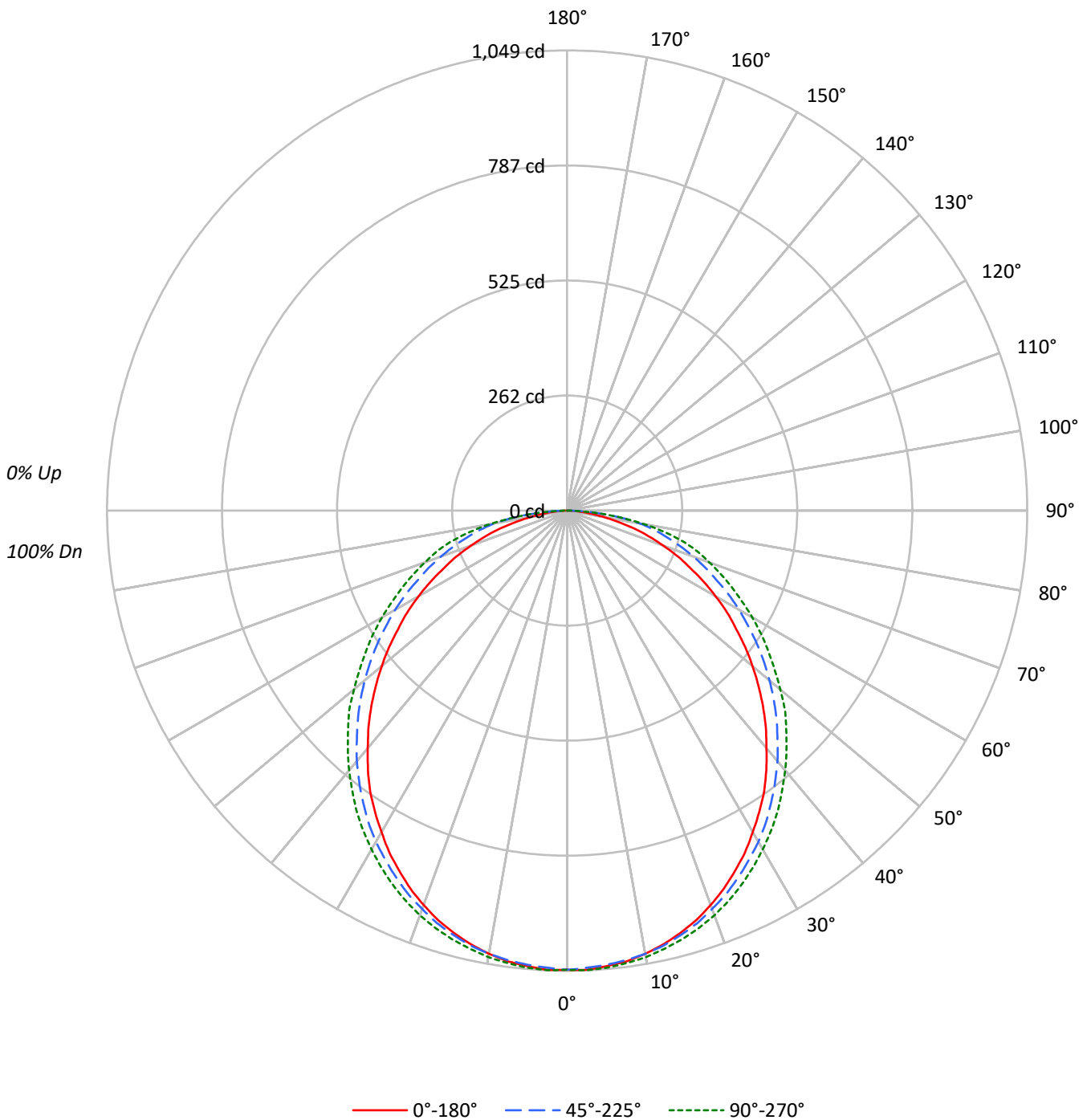
Input Watts (W): 19.716
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276464

CATALOG NUMBER: 24CZ2-30HE-S-UNV-L82765-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P276464

CATALOG NUMBER: 24CZ2-30HE-S-UNV-L82765-W2A1-U-3500K

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°	1409	1409	1409
5°	1408	1404	1413
10°	1402	1402	1412
15°	1388	1395	1410
20°	1370	1384	1405
25°	1345	1370	1397
30°	1315	1354	1385
35°	1286	1332	1374
40°	1242	1310	1358
45°	1201	1284	1344
50°	1155	1260	1328
55°	1103	1237	1315
60°	1052	1218	1312
65°	985	1196	1320
70°	912	1203	1355
75°	817	1225	1432
80°	660	1298	1401
85°	497	1139	1110



TEST NUMBER: P276464

CATALOG NUMBER: 24CZ2-30HE-S-UNV-L82765-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	3.3
10°-20°	283.2	9.5
20°-30°	425.7	14.3
30°-40°	507.1	17.0
40°-50°	519.0	17.4
50°-60°	467.2	15.7
60°-70°	366.9	12.3
70°-80°	238.1	8.0
80°-90°	73.6	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°	808.0	27.1
0°-40°	1315.1	44.1
0°-60°	2301.3	77.2
0°-90°	2980.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2980.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1047	1047	1047	1047	1047	
5°	1042	1044	1039	1045	1046	99
15°	997	1000	1002	1010	1012	281
25°	906	913	923	938	941	417
35°	783	792	811	831	837	488
45°	631	646	675	700	706	487
55°	470	491	527	555	560	422
65°	310	333	376	407	415	308
75°	157	187	236	268	275	166
85°	32	60	74	72	72	39
90°	0	0	0	0	0	



TEST NUMBER: P276464

CATALOG NUMBER: 24CZ2-30HE-S-UNV-L82765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1046.9	1046.9	1046.9	1046.9	1046.9
2.5°	1047.8	1047.8	1043.1	1047.8	1048.8
5°	1042.2	1044.1	1039.3	1045.0	1045.9
7.5°	1036.5	1036.5	1033.6	1039.3	1040.3
10°	1026.1	1027.0	1026.1	1032.7	1033.6
12.5°	1012.8	1014.7	1015.7	1022.3	1023.2
15°	996.7	999.6	1001.5	1010.0	1011.9
17.5°	978.7	981.6	986.3	995.8	997.7
20°	957.0	960.8	966.4	978.7	981.6
22.5°	933.3	937.1	946.6	957.9	962.6
25°	905.9	913.4	922.9	938.0	940.9
27.5°	878.4	885.0	897.3	913.4	917.2
30°	846.2	856.6	871.8	887.9	891.7
32.5°	815.0	825.4	843.4	860.4	865.2
35°	782.8	792.3	811.2	831.1	836.8
37.5°	745.9	758.2	779.0	798.9	804.6
40°	707.1	722.2	745.9	766.7	773.3
42.5°	670.2	686.3	709.9	732.6	740.2
45°	631.4	646.5	674.9	700.5	706.1
47.5°	591.6	608.6	638.9	664.5	673.9
50°	551.8	569.8	602.0	628.5	634.2
52.5°	512.1	531.0	565.1	593.5	596.3
55°	470.4	491.3	527.2	554.7	560.4
57.5°	432.6	450.6	489.4	517.8	524.4
60°	390.9	410.8	452.5	479.0	487.5
62.5°	351.2	372.0	415.5	442.0	449.6
65°	309.5	333.2	375.8	407.0	414.6
67.5°	273.6	296.3	341.7	372.0	379.6
70°	231.9	257.5	305.7	337.0	344.5
72.5°	195.9	222.4	270.7	301.0	312.4
75°	157.1	187.4	235.7	267.9	275.4
77.5°	119.3	154.3	203.5	228.1	228.1
80°	85.2	122.1	167.5	178.9	180.8
82.5°	55.8	91.8	124.0	123.1	123.1
85°	32.2	59.6	73.8	71.9	71.9
87.5°	12.3	24.6	26.5	26.5	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)