

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: P277330

Luminaire Tested: **22CZ2-29HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277330
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29HE-S-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2647.0 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

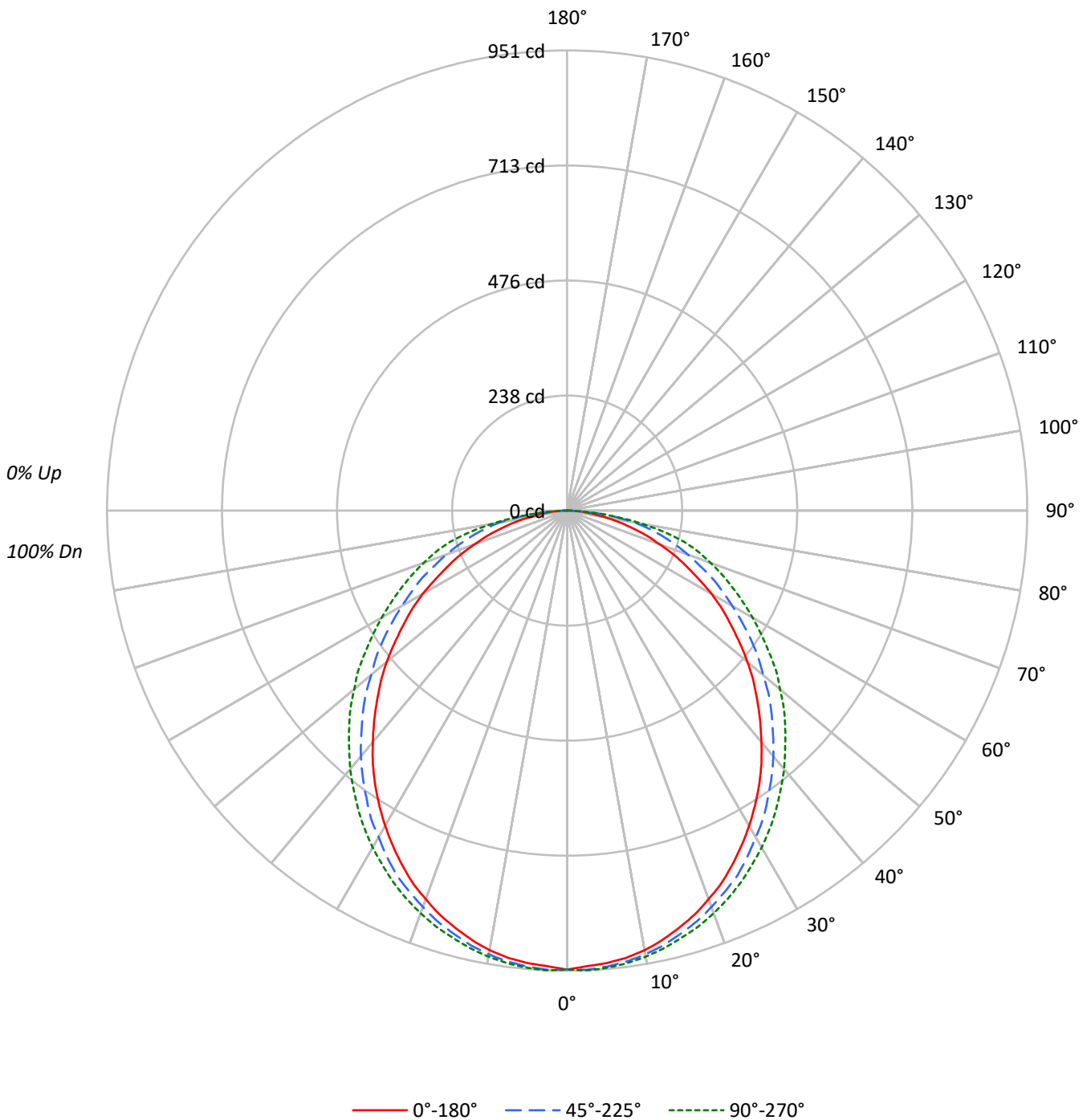
Input Watts (W): 20.832
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2552	2552	2552
5°	2535	2555	2562
10°	2521	2544	2558
15°	2488	2522	2546
20°	2447	2497	2536
25°	2398	2472	2519
30°	2337	2421	2498
35°	2272	2377	2475
40°	2195	2330	2451
45°	2115	2275	2425
50°	2037	2213	2404
55°	1941	2173	2387
60°	1855	2120	2379
65°	1730	2108	2406
70°	1593	2089	2478
75°	1438	2119	2607
80°	1244	2182	2450
85°	1028	1831	1831



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	3.4
10°-20°	255.3	9.6
20°-30°	381.9	14.4
30°-40°	452.3	17.1
40°-50°	461.0	17.4
50°-60°	413.1	15.6
60°-70°	323.5	12.2
70°-80°	208.6	7.9
80°-90°	61.6	2.3
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°	726.9	27.5
0°-40°	1179.2	44.5
0°-60°	2053.3	77.6
0°-90°	2647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2647.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	939	941	946	947	948	89
15°	893	898	905	913	914	252
25°	808	815	832	844	848	372
35°	692	700	724	746	753	432
45°	556	568	598	629	637	429
55°	414	427	463	495	509	371
65°	272	288	331	363	378	270
75°	138	159	204	238	251	148
85°	33	46	59	59	59	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	948.5	948.5	948.5	948.5	948.5
2.5°	942.3	944.8	949.7	951.0	951.0
5°	938.6	941.1	946.0	947.3	948.5
7.5°	932.4	933.7	939.9	942.3	943.6
10°	922.6	925.0	931.2	934.9	936.2
12.5°	909.0	912.7	920.1	925.0	926.3
15°	892.9	897.9	905.3	912.7	913.9
17.5°	875.6	880.6	890.5	899.1	901.6
20°	854.6	860.8	871.9	881.8	885.5
22.5°	833.6	838.6	852.2	864.5	868.2
25°	807.7	815.1	832.4	843.5	848.5
27.5°	780.5	789.2	806.5	821.3	826.2
30°	752.1	760.8	779.3	797.8	804.0
32.5°	722.5	732.4	754.6	773.1	779.3
35°	691.6	700.3	723.7	746.0	753.4
37.5°	659.5	666.9	694.1	717.6	725.0
40°	624.9	634.8	663.2	690.4	697.8
42.5°	590.3	601.5	629.9	659.5	666.9
45°	555.8	568.1	597.8	628.6	637.3
47.5°	522.4	532.3	565.6	595.3	607.6
50°	486.6	496.5	528.6	561.9	574.3
52.5°	449.6	463.1	497.7	529.8	544.6
55°	413.7	427.3	463.1	495.2	508.8
57.5°	380.4	391.5	428.6	461.9	475.5
60°	344.6	354.5	394.0	429.8	442.1
62.5°	306.3	321.1	361.9	395.2	410.0
65°	271.7	287.8	331.0	363.1	377.9
67.5°	239.6	254.4	296.4	331.0	347.0
70°	202.5	222.3	265.5	300.1	314.9
72.5°	172.9	190.2	234.7	269.2	285.3
75°	138.3	159.3	203.8	238.4	250.7
77.5°	109.9	130.9	172.9	200.1	206.2
80°	80.3	101.3	140.8	154.4	158.1
82.5°	54.3	74.1	101.3	105.0	106.2
85°	33.3	45.7	59.3	59.3	59.3
87.5°	16.1	18.5	21.0	19.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)