

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: P277165

Luminaire Tested: **22CZ2-29HE-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277165
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29HE-UNV-L83050-W2A1-U-4500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2816.0 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

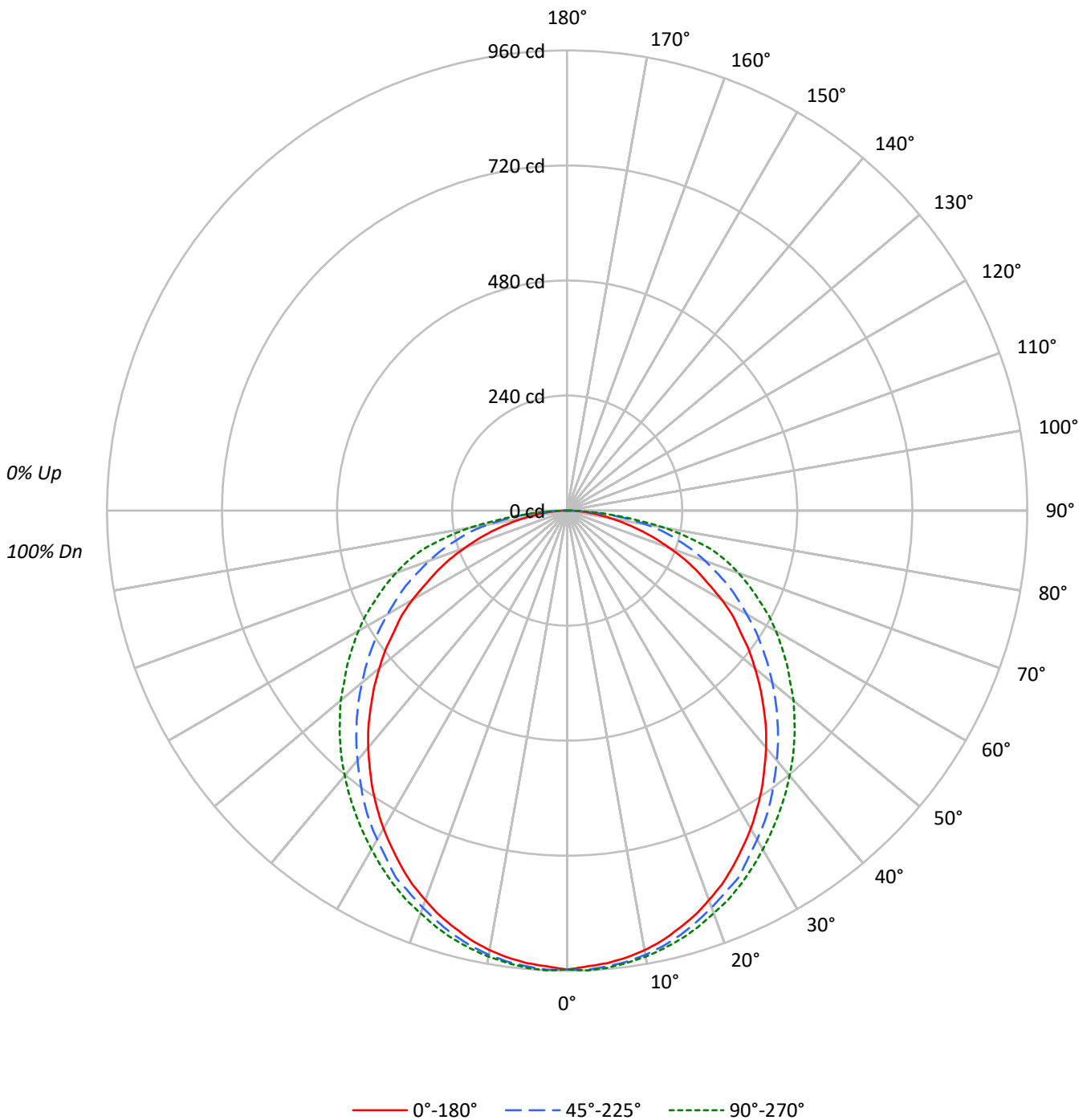
Input Watts (W): 21.855
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2577	2577	2577
5°	2560	2579	2586
10°	2544	2571	2582
15°	2513	2552	2575
20°	2476	2524	2560
25°	2431	2510	2551
30°	2381	2463	2536
35°	2326	2431	2531
40°	2268	2390	2536
45°	2204	2363	2552
50°	2141	2338	2581
55°	2067	2327	2626
60°	2006	2327	2707
65°	1906	2365	2805
70°	1777	2409	2987
75°	1628	2492	3227
80°	1418	2599	3178
85°	1241	2309	2526



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	3.2
10°-20°	257.9	9.2
20°-30°	387.2	13.7
30°-40°	462.7	16.4
40°-50°	481.1	17.1
50°-60°	445.9	15.8
60°-70°	365.7	13.0
70°-80°	247.2	8.8
80°-90°	77.7	2.8
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°	735.7	26.1
0°-40°	1198.3	42.6
0°-60°	2125.3	75.5
0°-90°	2816.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2816.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	948	949	955	956	958	90
15°	902	906	916	922	924	254
25°	819	826	845	855	859	377
35°	708	718	740	762	770	443
45°	579	590	621	657	671	447
55°	441	454	496	540	560	396
65°	299	316	371	420	441	296
75°	157	183	240	288	310	166
85°	40	55	75	83	82	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	957.5	957.5	957.5	957.5	957.5
2.5°	951.9	954.7	958.9	960.3	960.3
5°	947.8	949.2	954.7	956.1	957.5
7.5°	940.9	943.6	949.2	950.6	951.9
10°	931.2	933.9	940.9	943.6	945.0
12.5°	918.7	921.5	929.8	933.9	935.3
15°	902.1	906.2	915.9	921.5	924.2
17.5°	885.4	889.6	899.3	907.6	910.4
20°	864.7	874.4	881.3	892.4	893.8
22.5°	843.9	849.4	861.9	873.0	878.5
25°	818.9	825.9	845.3	855.0	859.1
27.5°	792.6	802.3	817.5	832.8	838.3
30°	766.3	773.2	792.6	810.6	816.2
32.5°	737.2	746.9	767.7	785.7	794.0
35°	708.1	717.8	739.9	762.1	770.4
37.5°	676.2	687.3	709.5	735.8	746.9
40°	645.7	654.0	680.4	712.2	721.9
42.5°	613.8	623.5	651.3	685.9	697.0
45°	579.2	590.3	620.8	656.8	670.7
47.5°	546.0	557.0	590.3	626.3	642.9
50°	511.3	525.2	558.4	600.0	616.6
52.5°	478.1	490.5	527.9	570.9	586.1
55°	440.6	454.5	496.1	540.4	559.8
57.5°	410.2	419.9	465.6	511.3	530.7
60°	372.7	385.2	432.3	480.8	503.0
62.5°	332.6	353.3	401.8	451.7	473.9
65°	299.3	315.9	371.4	419.9	440.6
67.5°	264.7	282.7	336.7	388.0	411.5
70°	225.9	249.4	306.2	357.5	379.7
72.5°	191.2	216.2	274.4	324.2	347.8
75°	156.6	182.9	239.7	288.2	310.4
77.5°	123.3	152.4	207.8	245.3	259.1
80°	91.5	119.2	167.7	194.0	205.1
82.5°	63.7	87.3	123.3	137.2	140.0
85°	40.2	55.4	74.8	83.1	81.8
87.5°	18.0	22.2	27.7	30.5	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)