

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: NEO-RAY

Report Number: P231679

Luminaire Tested: **S123-DR-1-27-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231679
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29683)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123-DR-1-27-X-0048-1-U-DD-1-W
Description: DEFINE 3 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2237.8 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.22' x L: 3.92' x H: 0')
CIE Type: Direct

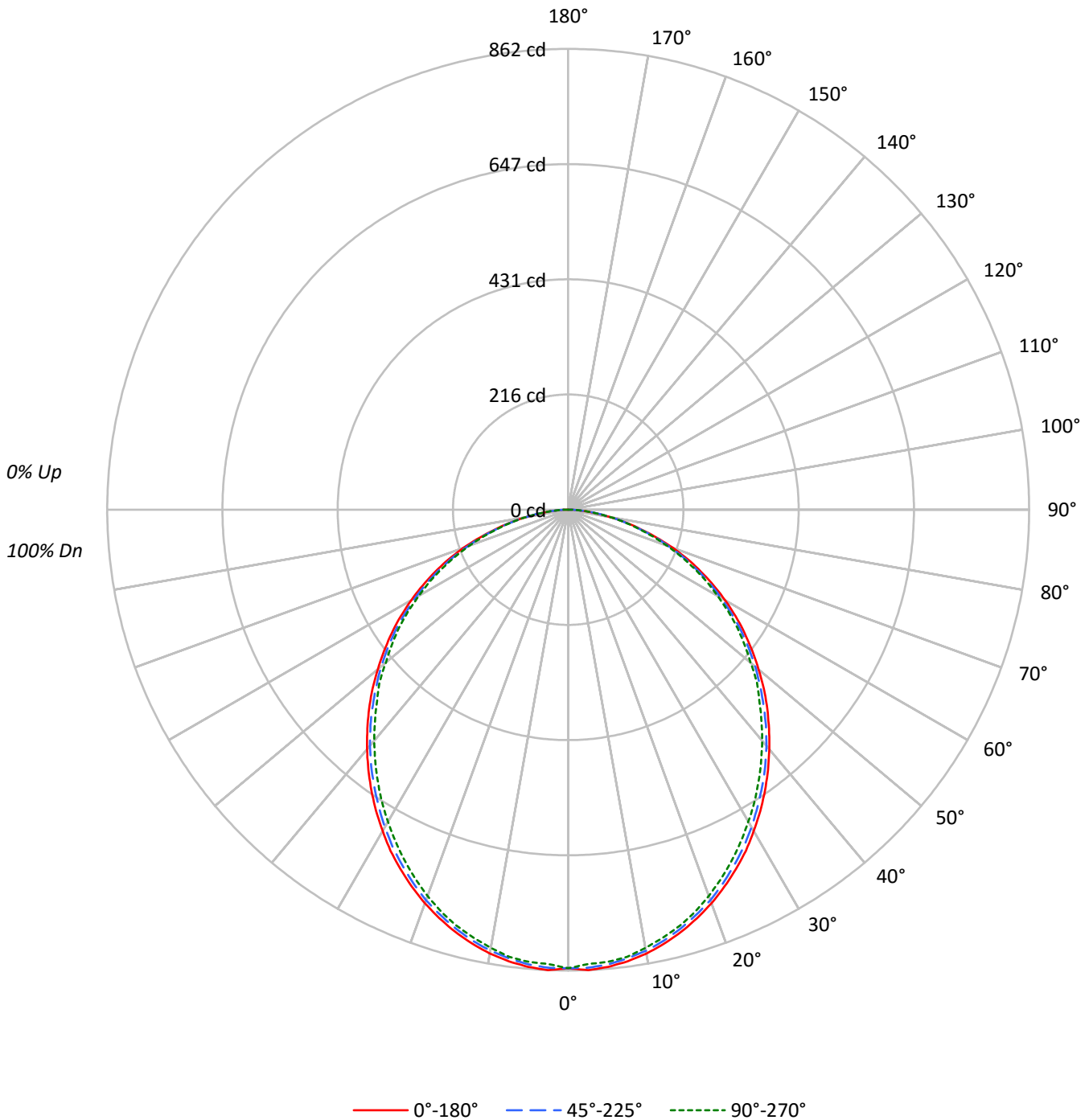
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10553	10553	10553
5°	10604	10547	10489
10°	10534	10466	10399
15°	10415	10336	10267
20°	10260	10180	10069
25°	10073	9967	9832
30°	9861	9740	9576
35°	9637	9497	9324
40°	9400	9264	9064
45°	9162	8988	8800
50°	8897	8735	8528
55°	8645	8463	8297
60°	8339	8133	7923
65°	7979	7732	7574
70°	7470	7222	7056
75°	6681	6534	6386
80°	5691	5691	5691
85°	4575	4801	4801



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	3.6
10°-20°	228.2	10.2
20°-30°	336.8	15.1
30°-40°	394.0	17.6
40°-50°	397.6	17.8
50°-60°	351.7	15.7
60°-70°	263.2	11.8
70°-80°	146.2	6.5
80°-90°	39.3	1.8
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°	645.8	28.9
0°-40°	1039.8	46.5
0°-60°	1789.1	79.9
0°-90°	2237.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2237.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	858	850	854	851	849	81
15°	817	808	811	808	806	230
25°	742	732	734	726	724	342
35°	641	633	632	623	621	401
45°	526	520	516	508	506	406
55°	403	399	394	387	387	360
65°	274	270	266	262	260	271
75°	140	139	137	135	134	149
85°	32	34	34	33	34	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	857.5	857.5	857.5	857.5	857.5
2.5°	862.2	852.9	857.5	855.2	850.6
5°	858.3	849.8	853.7	850.6	849.0
7.5°	852.1	842.9	846.7	843.6	843.6
10°	842.9	833.6	837.5	833.6	832.1
12.5°	831.3	822.0	825.9	821.3	819.7
15°	817.4	808.1	811.2	808.1	805.8
17.5°	801.2	792.7	795.0	791.2	788.8
20°	783.4	774.2	777.3	771.1	768.8
22.5°	763.4	754.1	756.4	748.7	747.2
25°	741.8	732.5	734.0	726.3	724.0
27.5°	719.4	709.3	710.9	702.4	699.3
30°	693.9	684.6	685.4	676.9	673.8
32.5°	668.4	659.2	659.2	649.9	648.4
35°	641.4	632.9	632.1	622.9	620.6
37.5°	613.6	605.9	605.1	595.1	592.8
40°	585.1	578.1	576.6	566.5	564.2
42.5°	555.7	548.8	547.2	537.2	534.9
45°	526.4	519.5	516.4	507.9	505.6
47.5°	496.3	490.9	486.3	478.6	478.6
50°	464.7	460.0	456.2	448.4	445.4
52.5°	433.8	429.9	425.3	418.3	416.0
55°	402.9	399.0	394.4	386.7	386.7
57.5°	371.3	366.6	362.0	356.6	355.1
60°	338.8	335.0	330.4	325.0	321.9
62.5°	306.4	303.3	298.7	294.1	292.5
65°	274.0	270.1	265.5	261.7	260.1
67.5°	241.6	237.0	233.1	229.2	228.5
70°	207.6	203.8	200.7	196.1	196.1
72.5°	172.9	169.8	168.3	165.9	165.2
75°	140.5	138.9	137.4	135.1	134.3
77.5°	109.6	109.6	108.1	107.3	107.3
80°	80.3	81.8	80.3	80.3	80.3
82.5°	54.0	54.8	55.6	55.6	54.8
85°	32.4	34.0	34.0	33.2	34.0
87.5°	15.4	15.4	15.4	15.4	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)