

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: P242078

Luminaire Tested: **S121DR-S305D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242078
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121DR-S305D927-X4F0-XX-UDD-F-W
Description: DEFINE 1 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 951.3 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

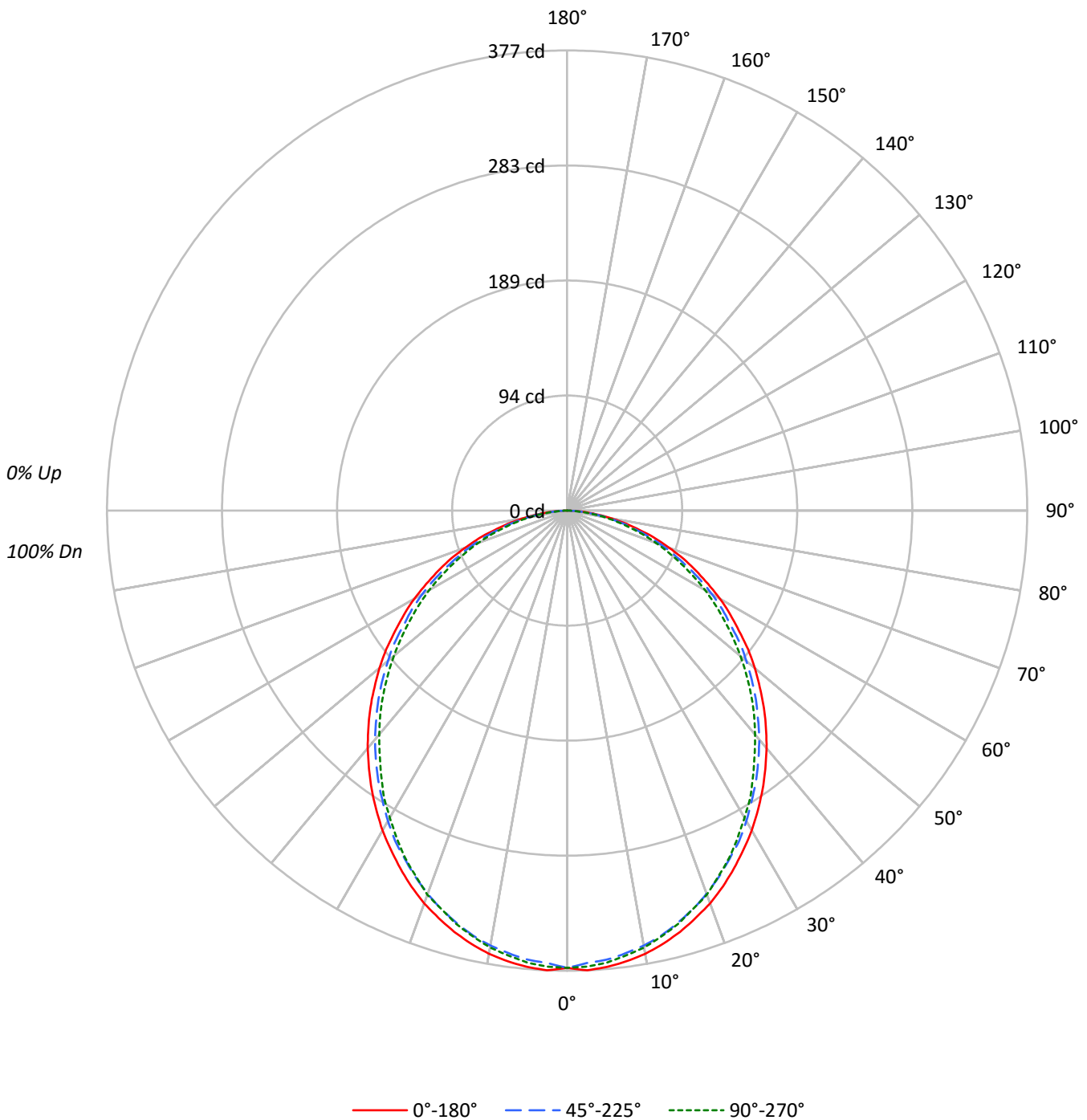
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	66	76	70	64	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11099	11099	11099
5°	11163	10987	11058
10°	11093	10885	10937
15°	10960	10727	10758
20°	10796	10535	10557
25°	10573	10292	10269
30°	10353	10048	9939
35°	10095	9759	9607
40°	9832	9472	9260
45°	9550	9160	8929
50°	9247	8832	8546
55°	8880	8436	8131
60°	8569	8119	7745
65°	8147	7614	7228
70°	7667	7104	6714
75°	7052	6457	6022
80°	6262	5665	5255
85°	5167	4250	3774



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	3.7
10°-20°	99.3	10.4
20°-30°	146.1	15.4
30°-40°	169.6	17.8
40°-50°	169.2	17.8
50°-60°	147.3	15.5
60°-70°	108.5	11.4
70°-80°	60.4	6.4
80°-90°	15.6	1.6
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°	280.7	29.5
0°-40°	450.3	47.3
0°-60°	766.8	80.6
0°-90°	951.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	951.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	375	375	375	375	375	
5°	375	374	369	372	372	36
15°	357	354	350	352	351	101
25°	323	320	315	315	314	149
35°	279	276	270	267	266	175
45°	228	224	219	214	213	176
55°	172	170	163	160	157	154
65°	116	114	109	105	103	115
75°	62	60	56	54	53	66
85°	15	14	12	12	11	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	374.6	374.6	374.6	374.6	374.6
2.5°	377.0	374.9	371.1	374.2	373.9
5°	375.3	373.6	369.4	372.5	371.8
7.5°	372.5	370.4	365.9	368.7	367.7
10°	368.7	366.6	361.8	363.9	363.5
12.5°	363.5	361.1	356.6	358.3	357.3
15°	357.3	354.5	349.7	352.1	350.7
17.5°	350.0	346.9	342.4	343.8	342.4
20°	342.4	339.0	334.1	335.5	334.8
22.5°	333.4	330.3	324.8	325.5	324.1
25°	323.4	319.9	314.8	315.4	314.1
27.5°	313.0	309.9	305.1	304.0	302.3
30°	302.6	298.8	293.7	292.3	290.5
32.5°	290.9	287.4	281.6	280.2	279.1
35°	279.1	275.7	269.8	267.0	265.6
37.5°	266.7	263.2	257.3	254.2	252.2
40°	254.2	250.4	244.9	241.8	239.4
42.5°	241.1	237.6	231.4	228.3	226.6
45°	227.9	224.1	218.6	214.4	213.1
47.5°	214.1	210.6	205.1	200.6	199.2
50°	200.6	196.8	191.6	187.1	185.4
52.5°	186.8	183.3	178.5	174.0	171.2
55°	171.9	169.8	163.3	160.1	157.4
57.5°	158.4	156.0	150.8	145.6	143.9
60°	144.6	141.8	137.0	132.5	130.7
62.5°	130.1	128.0	123.1	119.0	116.6
65°	116.2	113.8	108.6	105.1	103.1
67.5°	103.4	100.3	95.1	91.7	89.9
70°	88.5	86.1	82.0	79.2	77.5
72.5°	75.7	73.0	69.2	66.4	64.7
75°	61.6	59.8	56.4	54.0	52.6
77.5°	49.1	46.7	44.3	42.5	41.5
80°	36.7	34.9	33.2	31.5	30.8
82.5°	25.6	24.2	22.5	21.4	20.4
85°	15.2	14.5	12.5	11.8	11.1
87.5°	7.3	6.2	4.2	3.8	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)