

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: P242938

Luminaire Tested: **S121DR-H305D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242938
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-47)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121DR-H305D927-X4F0-XX-UDD-F-W
Description: DEFINE 1 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 907.8 lumens
Efficiency: N/A
Efficacy: 81.1 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

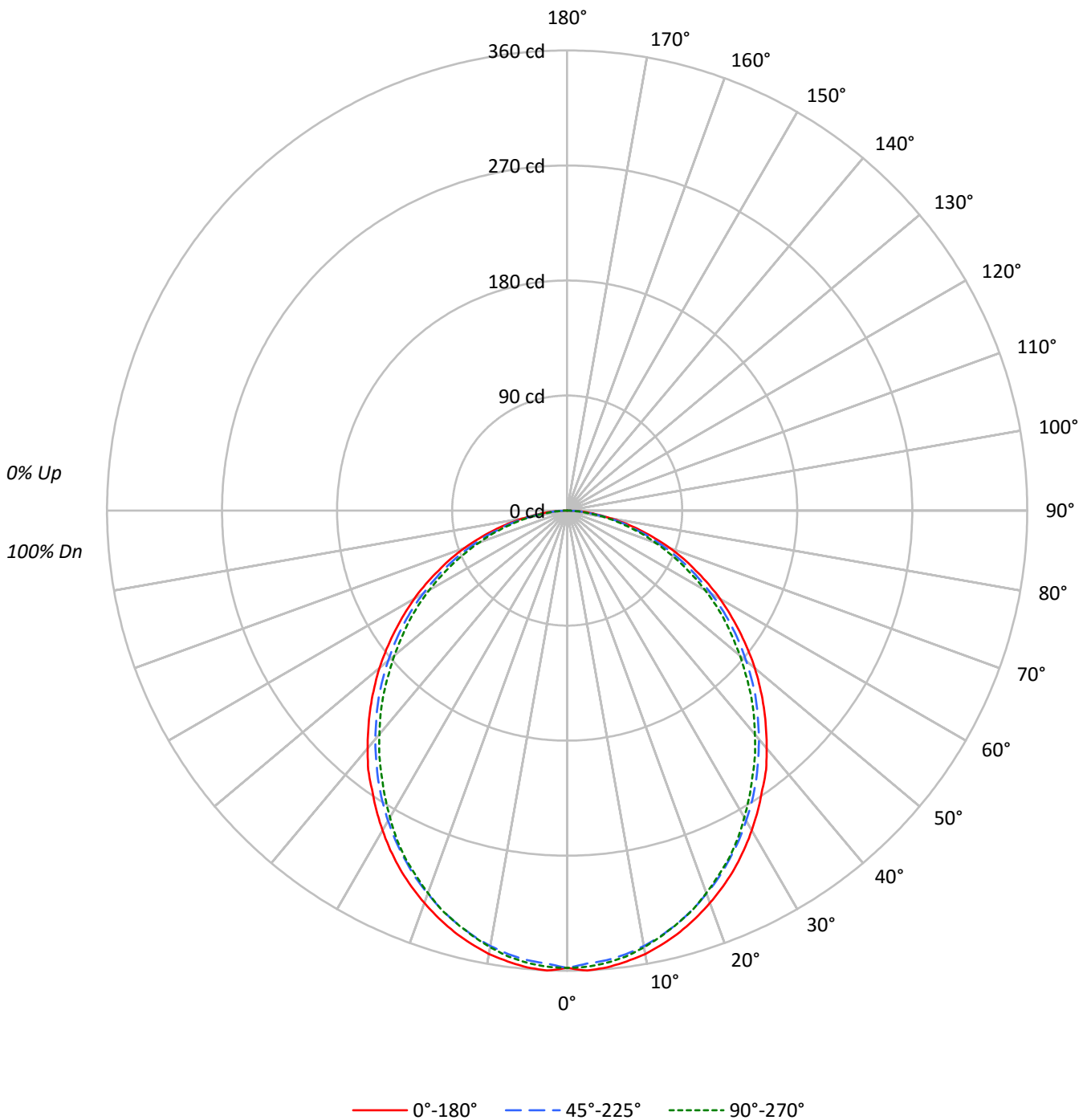
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	97	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	81	73	66	88	79	72	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	52
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°	10602	10602	10602
5°	10672	10505	10565
10°	10597	10407	10437
15°	10469	10255	10255
20°	10301	10058	10040
25°	10115	9834	9801
30°	9884	9587	9484
35°	9632	9321	9151
40°	9391	9032	8838
45°	9118	8753	8506
50°	8837	8422	8131
55°	8498	8105	7795
60°	8196	7722	7390
65°	7789	7298	6906
70°	7381	6783	6350
75°	6754	6148	5770
80°	5887	5426	5034
85°	5065	4182	3502



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.7	3.7
10°-20°	94.9	10.5
20°-30°	139.5	15.4
30°-40°	161.9	17.8
40°-50°	161.4	17.8
50°-60°	140.6	15.5
60°-70°	103.4	11.4
70°-80°	57.6	6.3
80°-90°	14.8	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°	268.1	29.5
0°-40°	429.9	47.4
0°-60°	731.9	80.6
0°-90°	907.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	907.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	359	357	353	356	355	34
15°	341	339	334	336	334	96
25°	309	306	301	301	300	142
35°	266	263	258	255	253	167
45°	218	214	209	205	203	168
55°	164	162	157	153	151	147
65°	111	109	104	100	98	110
75°	59	56	54	51	50	63
85°	15	14	12	11	10	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	357.8	357.8	357.8	357.8	357.8
2.5°	360.2	358.2	354.8	357.8	357.2
5°	358.8	356.8	353.2	355.8	355.2
7.5°	355.8	354.2	350.2	352.5	351.9
10°	352.2	350.2	345.9	347.9	346.9
12.5°	347.2	345.6	340.6	342.2	340.9
15°	341.3	339.3	334.3	335.6	334.3
17.5°	334.3	332.3	327.0	328.0	327.3
20°	326.7	324.0	319.0	319.7	318.4
22.5°	318.4	315.4	310.4	310.4	309.1
25°	309.4	305.8	300.8	300.8	299.8
27.5°	299.5	296.1	290.8	290.2	289.2
30°	288.9	285.5	280.2	278.9	277.2
32.5°	277.9	274.3	269.3	267.0	265.3
35°	266.3	263.0	257.7	254.7	253.0
37.5°	255.7	251.0	245.4	242.8	241.4
40°	242.8	238.8	233.5	229.8	228.5
42.5°	230.2	226.5	220.9	217.2	216.2
45°	217.6	213.9	208.9	204.6	203.0
47.5°	204.6	201.0	196.0	191.7	189.4
50°	191.7	188.0	182.7	178.4	176.4
52.5°	178.1	175.4	169.8	165.8	163.2
55°	164.5	161.5	156.9	152.6	150.9
57.5°	151.2	148.6	143.6	139.0	138.0
60°	138.3	135.6	130.3	126.4	124.7
62.5°	124.7	122.0	117.1	113.1	111.4
65°	111.1	108.8	104.1	99.8	98.5
67.5°	98.5	95.5	91.2	87.2	85.6
70°	85.2	81.9	78.3	74.9	73.3
72.5°	72.0	69.3	66.3	63.0	62.3
75°	59.0	56.4	53.7	51.4	50.4
77.5°	46.8	44.8	42.8	40.5	39.8
80°	34.5	33.2	31.8	30.2	29.5
82.5°	24.2	23.2	21.2	19.9	19.2
85°	14.9	13.9	12.3	10.6	10.3
87.5°	7.0	5.6	4.3	3.6	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)