

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1057974

Luminaire Tested: S122RDR-S485D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057974
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D840-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

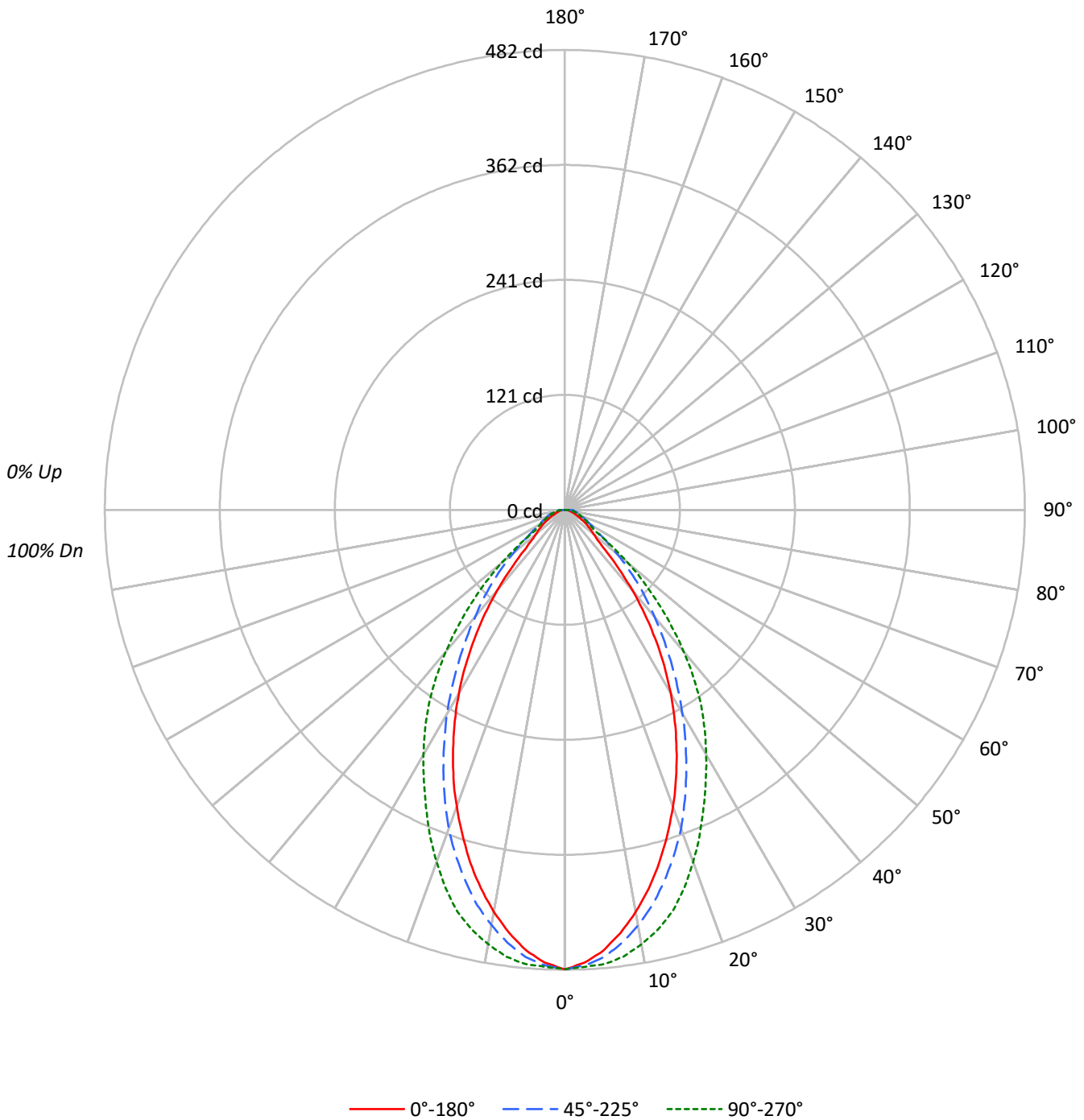
Lumens per Lamp: N/A
Luminaire Lumens: 584.0 lumens
Efficiency: N/A
Efficacy: 29.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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: 24 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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8885	8885	8885
5°	8587	8719	8852
10°	8016	8284	8660
15°	7311	7695	8323
20°	6504	6983	7713
25°	5638	6132	7006
30°	4726	5259	6311
35°	3724	4352	5591
40°	2654	3514	4671
45°	1568	2782	3622
50°	1128	2012	2463
55°	943	1451	1242
60°	764	1163	1055
65°	624	1030	969
70°	540	1003	928
75°	513	1020	920
80°	531	1211	988
85°	762	1969	1207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3622 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.2	7.6
10°-20°	113.5	19.4
20°-30°	140.0	24.0
30°-40°	124.5	21.3
40°-50°	79.5	13.6
50°-60°	38.1	6.5
60°-70°	22.4	3.8
70°-80°	14.3	2.4
80°-90°	7.6	1.3
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°	297.6	51.0
0°-40°	422.1	72.3
0°-60°	539.7	92.4
0°-90°	584.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	584.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	482	482	482	482	482	
5°	464	472	471	474	478	43
15°	383	392	403	421	436	107
25°	277	288	301	323	344	127
35°	165	178	193	222	248	103
45°	60	78	107	124	139	50
55°	29	38	45	44	39	26
65°	14	26	24	22	22	14
75°	7	16	14	14	13	8
85°	4	9	9	8	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	481.5	481.5	481.5	481.5	481.5
2.5°	475.0	482.9	477.9	477.9	479.3
5°	463.6	472.2	470.7	473.6	477.9
7.5°	447.1	456.4	457.9	465.7	472.2
10°	427.8	437.8	442.1	453.6	462.2
12.5°	406.4	416.4	424.2	438.5	450.7
15°	382.7	392.0	402.8	421.4	435.7
17.5°	357.0	369.2	379.9	399.2	415.7
20°	331.2	342.7	355.6	374.2	392.8
22.5°	304.8	315.5	328.4	347.7	369.2
25°	276.9	287.6	301.2	322.6	344.1
27.5°	249.7	260.4	273.3	296.9	319.8
30°	221.8	232.5	246.8	271.1	296.2
32.5°	193.9	205.3	219.6	246.1	272.6
35°	165.3	178.1	193.2	222.5	248.2
37.5°	137.4	150.2	168.8	197.5	221.8
40°	110.2	125.2	145.9	171.7	193.9
42.5°	83.7	100.2	125.9	146.7	166.0
45°	60.1	78.0	106.6	123.8	138.8
47.5°	45.8	58.7	88.0	101.6	112.3
50°	39.3	47.2	70.1	80.1	85.8
52.5°	34.3	41.5	55.8	60.8	60.8
55°	29.3	37.9	45.1	43.6	38.6
57.5°	25.0	34.3	37.2	31.5	32.9
60°	20.7	31.5	31.5	27.9	28.6
62.5°	17.2	29.3	27.2	24.3	25.0
65°	14.3	25.8	23.6	21.5	22.2
67.5°	11.4	22.9	20.7	19.3	19.3
70°	10.0	20.7	18.6	17.2	17.2
72.5°	8.6	17.9	16.5	15.0	15.0
75°	7.2	15.7	14.3	13.6	12.9
77.5°	6.4	13.6	12.9	11.4	10.7
80°	5.0	11.4	11.4	10.7	9.3
82.5°	4.3	10.0	10.0	9.3	7.9
85°	3.6	8.6	9.3	7.9	5.7
87.5°	2.9	7.9	7.9	6.4	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)