

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: P1057810

Luminaire Tested: S122RDR-S1005D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

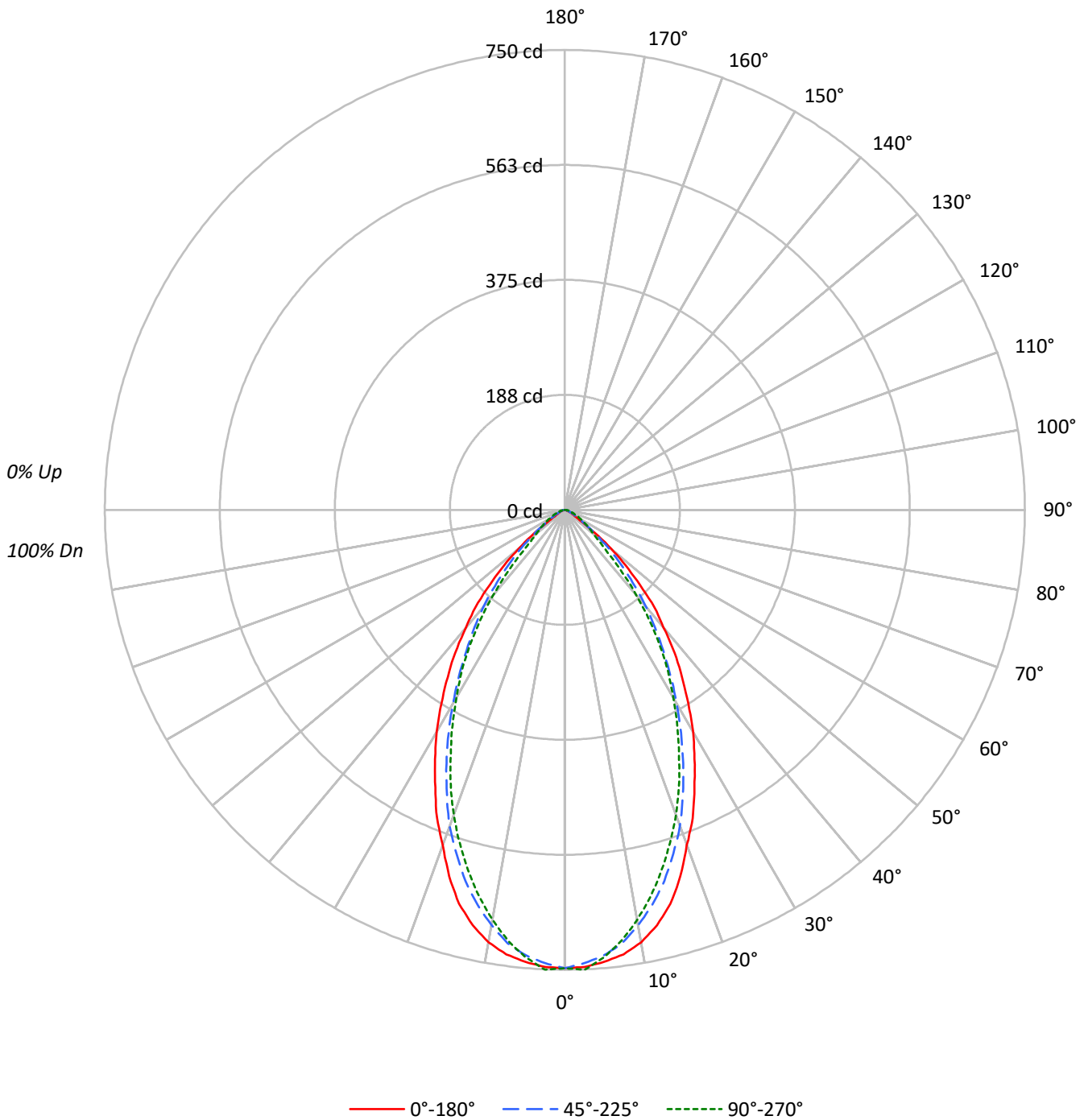
Lumens per Lamp: N/A
Luminaire Lumens: 803.9 lumens
Efficiency: N/A
Efficacy: 19.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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

TEST NUMBER: P1057810

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1057810

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-SVL-B

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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13791	13791	13791
5°	13707	13512	13568
10°	13418	12887	12719
15°	12711	11970	11628
20°	11425	10781	10400
25°	10176	9294	8960
30°	8900	7756	7534
35°	7495	6285	6082
40°	6036	4960	4384
45°	4517	3583	2610
50°	2828	2314	1714
55°	959	1248	1393
60°	550	771	1100
65°	393	520	847
70°	324	405	642
75°	214	321	535
80°	159	319	478
85°	0	0	318

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4517 cd/sqm



TEST NUMBER: P1057810

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	8.6
10°-20°	176.4	21.9
20°-30°	212.3	26.4
30°-40°	181.4	22.6
40°-50°	106.3	13.2
50°-60°	38.5	4.8
60°-70°	13.7	1.7
70°-80°	5.5	0.7
80°-90°	1.0	0.1
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°	457.6	56.9
0°-40°	639.0	79.5
0°-60°	783.8	97.5
0°-90°	803.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	803.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	740	742	730	732	732	70
15°	665	655	627	615	609	185
25°	500	479	456	449	440	229
35°	333	307	279	276	270	208
45°	173	155	137	115	100	134
55°	30	42	39	40	43	37
65°	9	10	12	16	19	10
75°	3	4	4	6	8	4
85°	0	0	0	2	2	1
90°	0	0	0	0	0	



TEST NUMBER: P1057810

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	747.4	747.4	747.4	747.4	747.4
2.5°	745.9	747.4	740.0	747.4	750.4
5°	740.0	741.5	729.5	732.5	732.5
7.5°	731.0	729.5	713.1	710.1	708.6
10°	716.1	711.6	687.8	683.3	678.8
12.5°	693.7	684.8	659.4	652.0	646.0
15°	665.4	654.9	626.6	614.7	608.7
17.5°	626.6	614.7	587.8	575.9	569.9
20°	581.8	569.9	549.0	535.6	529.6
22.5°	544.5	525.1	502.8	493.8	486.4
25°	499.8	478.9	456.5	449.1	440.1
27.5°	458.0	432.6	410.3	404.3	396.8
30°	417.7	390.9	364.0	364.0	353.6
32.5°	374.5	349.1	320.8	319.3	313.3
35°	332.7	307.3	279.0	276.0	270.0
37.5°	293.9	268.5	241.7	232.7	225.3
40°	250.6	228.3	205.9	191.0	182.0
42.5°	216.3	191.0	168.6	150.7	138.7
45°	173.1	155.2	137.3	114.9	100.0
47.5°	134.3	122.3	107.4	82.1	74.6
50°	98.5	92.5	80.6	61.2	59.7
52.5°	62.7	65.6	58.2	47.7	52.2
55°	29.8	41.8	38.8	40.3	43.3
57.5°	19.4	20.9	28.3	32.8	35.8
60°	14.9	14.9	20.9	26.9	29.8
62.5°	11.9	11.9	16.4	22.4	23.9
65°	9.0	10.4	11.9	16.4	19.4
67.5°	7.5	7.5	9.0	13.4	14.9
70°	6.0	6.0	7.5	10.4	11.9
72.5°	4.5	4.5	6.0	9.0	9.0
75°	3.0	4.5	4.5	6.0	7.5
77.5°	3.0	3.0	3.0	4.5	6.0
80°	1.5	1.5	3.0	3.0	4.5
82.5°	1.5	1.5	1.5	1.5	3.0
85°	0.0	0.0	0.0	1.5	1.5
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)