

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: P1057812

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057812
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-S1005D840-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

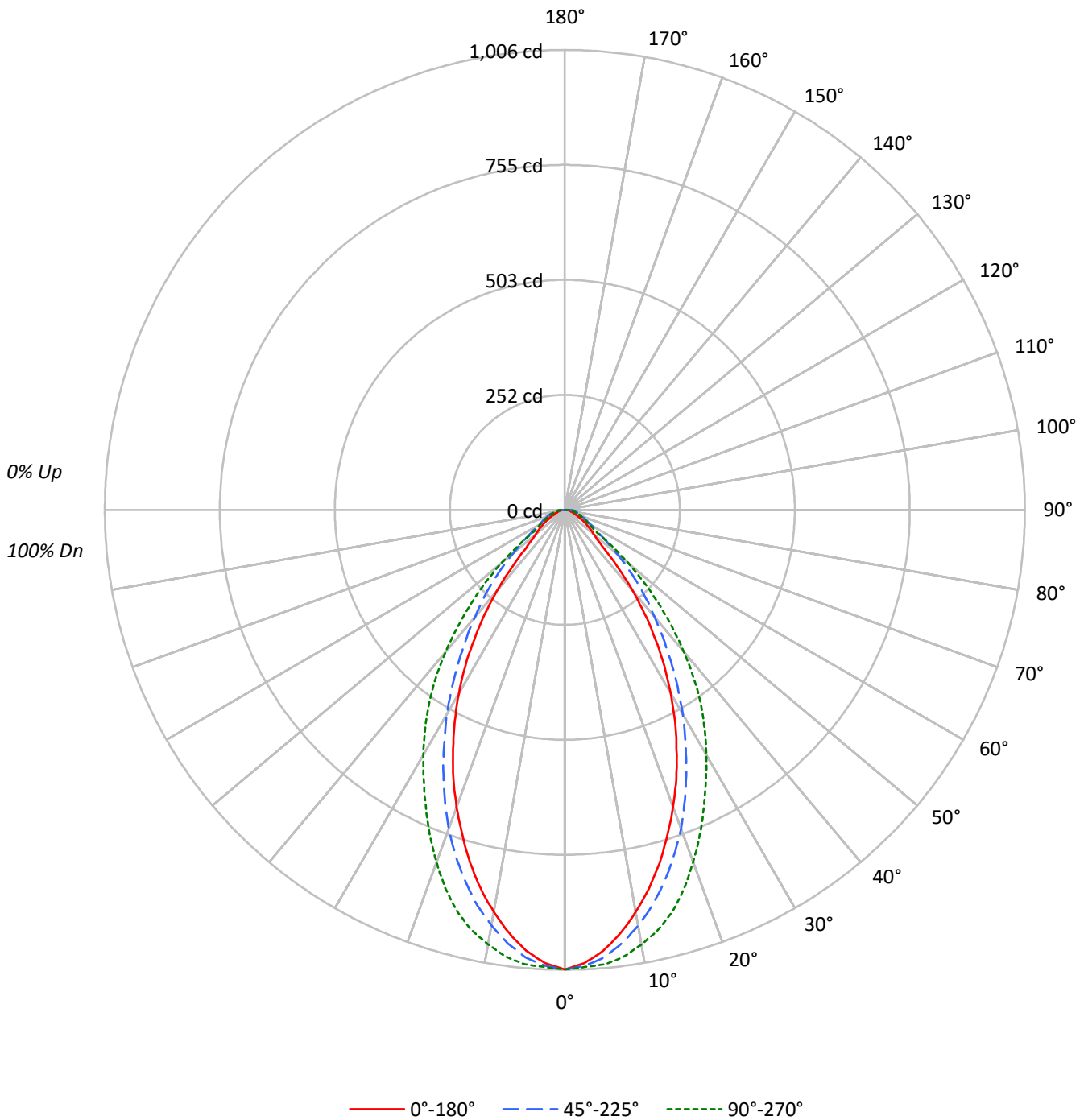
Lumens per Lamp: N/A
Luminaire Lumens: 1219.7 lumens
Efficiency: N/A
Efficacy: 29.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1057812

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

Luminous Intensity Polar Plot





TEST NUMBER: P1057812

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

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°	18554	18554	18554
5°	17934	18210	18486
10°	16742	17300	18085
15°	15269	16070	17382
20°	13585	14582	16108
25°	11772	12806	14633
30°	9869	10984	13181
35°	7774	9087	11678
40°	5543	7342	9753
45°	3275	5809	7565
50°	2360	4203	5147
55°	1972	3027	2596
60°	1598	2425	2207
65°	1306	2153	2022
70°	1128	2093	1937
75°	1062	2132	1918
80°	1116	2540	2062
85°	1588	4107	2541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7565 cd/sqm



TEST NUMBER: P1057812

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.2	7.6
10°-20°	236.9	19.4
20°-30°	292.3	24.0
30°-40°	260.0	21.3
40°-50°	166.0	13.6
50°-60°	79.7	6.5
60°-70°	46.8	3.8
70°-80°	29.9	2.4
80°-90°	15.9	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°	621.5	51.0
0°-40°	881.5	72.3
0°-60°	1127.1	92.4
0°-90°	1219.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1219.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	968	986	983	989	998	90
15°	799	819	841	880	910	223
25°	578	601	629	674	719	265
35°	345	372	403	465	518	214
45°	126	163	223	258	290	105
55°	61	79	94	91	81	55
65°	30	54	49	45	46	30
75°	15	33	30	28	27	16
85°	8	18	19	16	12	8
90°	0	0	0	0	0	



TEST NUMBER: P1057812

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1005.5	1005.5	1005.5	1005.5	1005.5
2.5°	992.1	1008.5	998.0	998.0	1001.0
5°	968.2	986.1	983.1	989.1	998.0
7.5°	933.8	953.2	956.2	972.6	986.1
10°	893.5	914.4	923.3	947.3	965.2
12.5°	848.6	869.6	886.0	915.9	941.3
15°	799.3	818.8	841.2	880.0	909.9
17.5°	745.5	770.9	793.4	833.7	868.1
20°	691.8	715.7	742.6	781.4	820.3
22.5°	636.5	658.9	685.8	726.1	770.9
25°	578.2	600.6	629.0	673.8	718.7
27.5°	521.4	543.8	570.7	620.0	667.9
30°	463.2	485.6	515.5	566.3	618.6
32.5°	404.9	428.8	458.7	514.0	569.2
35°	345.1	372.0	403.4	464.7	518.4
37.5°	286.9	313.8	352.6	412.4	463.2
40°	230.1	261.5	304.8	358.6	404.9
42.5°	174.8	209.2	263.0	306.3	346.6
45°	125.5	162.9	222.6	258.5	289.9
47.5°	95.6	122.5	183.8	212.2	234.6
50°	82.2	98.6	146.4	167.3	179.3
52.5°	71.7	86.7	116.5	127.0	127.0
55°	61.3	79.2	94.1	91.1	80.7
57.5°	52.3	71.7	77.7	65.7	68.7
60°	43.3	65.7	65.7	58.3	59.8
62.5°	35.9	61.3	56.8	50.8	52.3
65°	29.9	53.8	49.3	44.8	46.3
67.5°	23.9	47.8	43.3	40.3	40.3
70°	20.9	43.3	38.8	35.9	35.9
72.5°	17.9	37.4	34.4	31.4	31.4
75°	14.9	32.9	29.9	28.4	26.9
77.5°	13.4	28.4	26.9	23.9	22.4
80°	10.5	23.9	23.9	22.4	19.4
82.5°	9.0	20.9	20.9	19.4	16.4
85°	7.5	17.9	19.4	16.4	12.0
87.5°	6.0	16.4	16.4	13.4	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)