

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1058208

Luminaire Tested: S122RDR-H1005D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058208
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-H1005D835-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

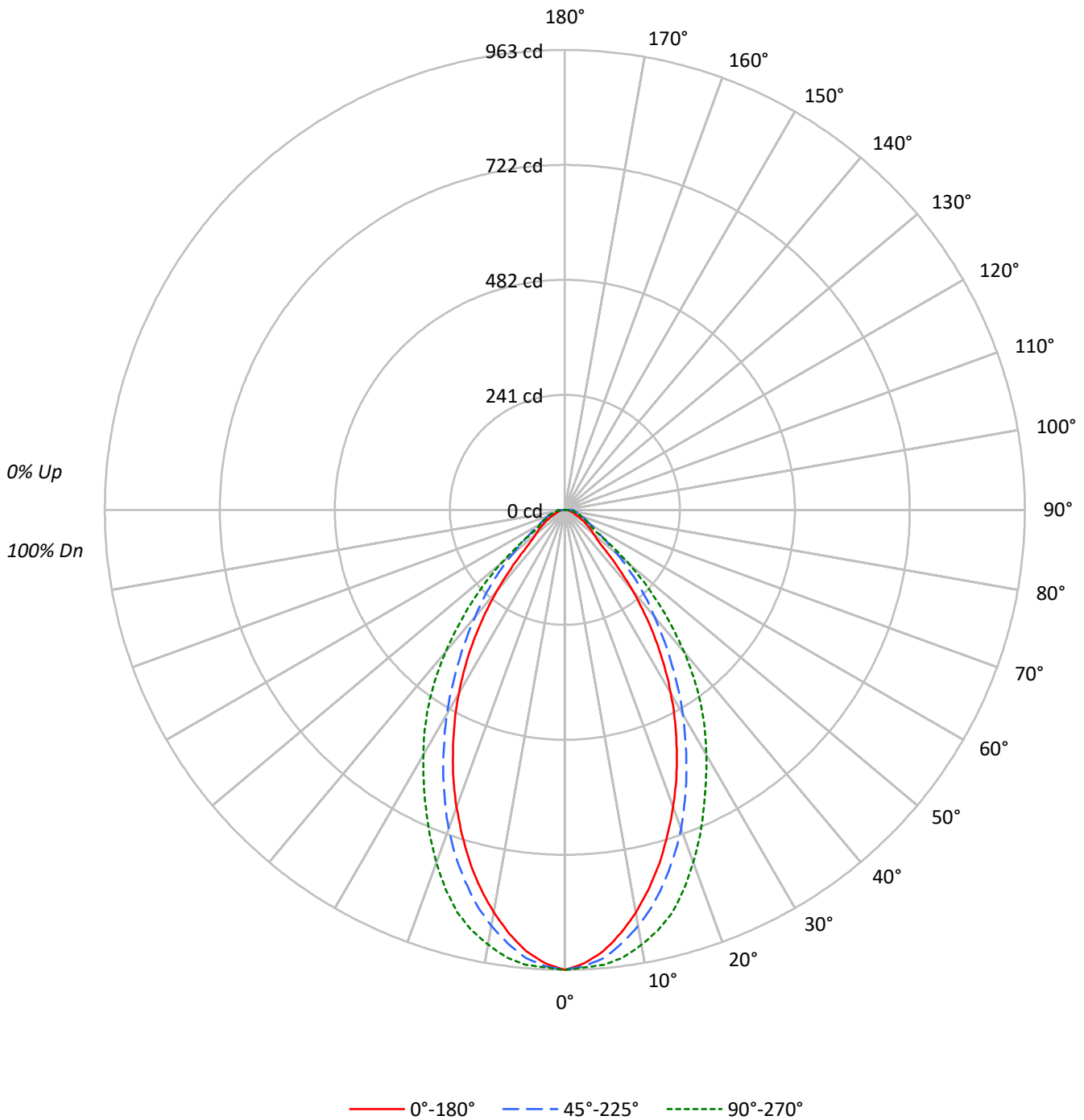
Lumens per Lamp: N/A
Luminaire Lumens: 1168.3 lumens
Efficiency: N/A
Efficacy: 32.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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: P1058208

CATALOG NUMBER: S122RDR-H1005D835-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1058208

CATALOG NUMBER: S122RDR-H1005D835-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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17773	17773	17773
5°	17178	17443	17708
10°	16035	16573	17322
15°	14627	15392	16651
20°	13011	13968	15429
25°	11277	12267	14016
30°	9454	10519	12624
35°	7447	8704	11187
40°	5309	7034	9341
45°	3137	5564	7244
50°	2259	4028	4929
55°	1888	2902	2487
60°	1532	2325	2111
65°	1249	2061	1939
70°	1079	2007	1851
75°	1020	2039	1839
80°	1063	2433	1977
85°	1524	3938	2414

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7244 cd/sqm



TEST NUMBER: P1058208

CATALOG NUMBER: S122RDR-H1005D835-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	7.6
10°-20°	227.0	19.4
20°-30°	280.0	24.0
30°-40°	249.0	21.3
40°-50°	159.0	13.6
50°-60°	76.3	6.5
60°-70°	44.8	3.8
70°-80°	28.6	2.5
80°-90°	15.2	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°	595.3	51.0
0°-40°	844.3	72.3
0°-60°	1079.6	92.4
0°-90°	1168.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1168.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	927	945	942	947	956	86
15°	766	784	806	843	872	213
25°	554	575	602	646	688	253
35°	331	356	386	445	497	205
45°	120	156	213	248	278	101
55°	59	76	90	87	77	53
65°	29	52	47	43	44	29
75°	14	32	29	27	26	16
85°	7	17	19	16	11	7
90°	0	0	0	0	0	



TEST NUMBER: P1058208

CATALOG NUMBER: S122RDR-H1005D835-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	963.2	963.2	963.2	963.2	963.2
2.5°	950.3	966.0	956.0	956.0	958.9
5°	927.4	944.6	941.7	947.4	956.0
7.5°	894.5	913.1	915.9	931.7	944.6
10°	855.8	875.9	884.5	907.4	924.5
12.5°	812.9	832.9	848.7	877.3	901.6
15°	765.7	784.3	805.7	843.0	871.6
17.5°	714.1	738.5	759.9	798.6	831.5
20°	662.6	685.5	711.3	748.5	785.7
22.5°	609.7	631.1	656.9	695.5	738.5
25°	553.9	575.3	602.5	645.5	688.4
27.5°	499.5	520.9	546.7	593.9	639.7
30°	443.7	465.1	493.7	542.4	592.5
32.5°	387.8	410.7	439.4	492.3	545.3
35°	330.6	356.4	386.4	445.1	496.6
37.5°	274.8	300.5	337.8	395.0	443.7
40°	220.4	250.5	292.0	343.5	387.8
42.5°	167.4	200.4	251.9	293.4	332.0
45°	120.2	156.0	213.2	247.6	277.6
47.5°	91.6	117.4	176.0	203.2	224.7
50°	78.7	94.5	140.3	160.3	171.7
52.5°	68.7	83.0	111.6	121.6	121.6
55°	58.7	75.9	90.2	87.3	77.3
57.5°	50.1	68.7	74.4	63.0	65.8
60°	41.5	63.0	63.0	55.8	57.2
62.5°	34.3	58.7	54.4	48.7	50.1
65°	28.6	51.5	47.2	42.9	44.4
67.5°	22.9	45.8	41.5	38.6	38.6
70°	20.0	41.5	37.2	34.3	34.3
72.5°	17.2	35.8	32.9	30.1	30.1
75°	14.3	31.5	28.6	27.2	25.8
77.5°	12.9	27.2	25.8	22.9	21.5
80°	10.0	22.9	22.9	21.5	18.6
82.5°	8.6	20.0	20.0	18.6	15.7
85°	7.2	17.2	18.6	15.7	11.4
87.5°	5.7	15.7	15.7	12.9	8.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058208
 CATALOG NUMBER: S122RDR-H1005D835-X4F0-XX-UDD-SVL-W

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	11.67	12.95	12.04	13.26	13.57	11.46	12.74	11.83	13.05	13.37
	3H	12.90	14.04	13.28	14.37	14.73	13.05	14.18	13.43	14.52	14.88
	4H	13.35	14.41	13.76	14.76	15.15	13.77	14.83	14.17	15.18	15.56
	6H	13.73	14.71	14.15	15.08	15.47	14.42	15.40	14.84	15.77	16.16
	8H	13.89	14.81	14.32	15.20	15.61	14.75	15.67	15.18	16.06	16.47
	12H	14.05	14.93	14.48	15.31	15.74	15.05	15.93	15.48	16.31	16.74
4H	2H	12.22	13.28	12.62	13.63	14.01	12.05	13.11	12.46	13.46	13.85
	3H	13.91	14.78	14.33	15.19	15.59	13.89	14.76	14.30	15.16	15.57
	4H	14.71	15.49	15.14	15.91	16.35	14.76	15.54	15.20	15.96	16.41
	6H	15.35	16.03	15.82	16.48	16.94	15.61	16.29	16.07	16.73	17.20
	8H	15.60	16.23	16.07	16.68	17.15	16.03	16.67	16.50	17.11	17.58
	12H	15.85	16.41	16.34	16.89	17.37	16.43	16.99	16.92	17.47	17.95
8H	4H	15.13	15.76	15.60	16.21	16.68	15.18	15.81	15.65	16.26	16.73
	6H	16.10	16.62	16.61	17.12	17.60	16.27	16.79	16.77	17.28	17.77
	8H	16.59	17.06	17.12	17.58	18.07	16.86	17.33	17.38	17.84	18.33
	12H	17.10	17.51	17.61	18.01	18.58	17.46	17.87	17.97	18.36	18.94
12H	4H	15.19	15.75	15.68	16.24	16.71	15.26	15.82	15.74	16.30	16.77
	6H	16.27	16.74	16.79	17.26	17.75	16.43	16.90	16.95	17.41	17.91
	8H	16.91	17.32	17.42	17.82	18.39	17.14	17.55	17.66	18.05	18.62