

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: P1058262

Luminaire Tested: S122RDR-H1005D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058262
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-H1005D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

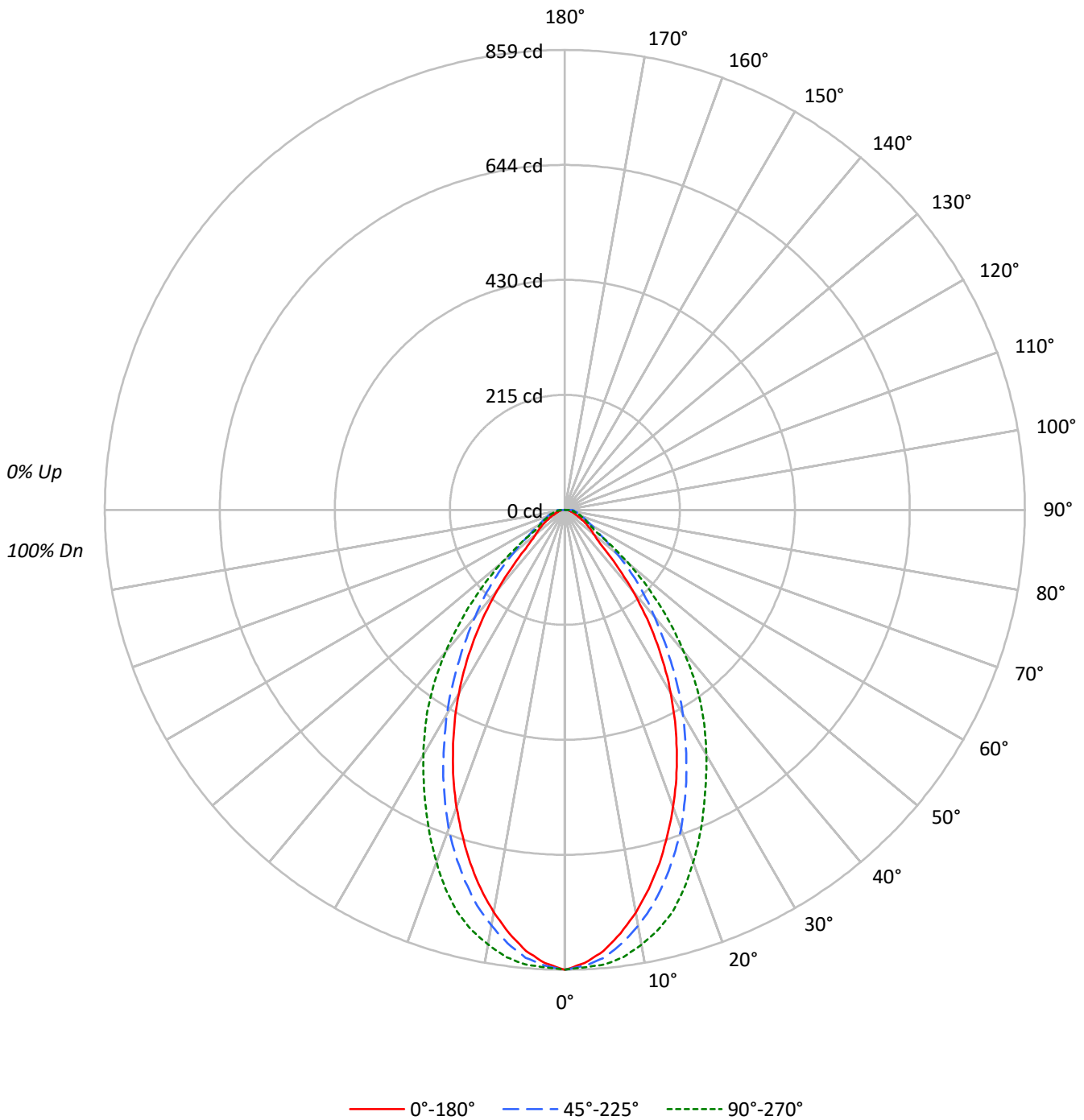
Lumens per Lamp: N/A
Luminaire Lumens: 1041.8 lumens
Efficiency: N/A
Efficacy: 28.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	15849	15849	15849
5°	15318	15554	15791
10°	14300	14778	15447
15°	13044	13726	14847
20°	11603	12456	13757
25°	10056	10939	12497
30°	8429	9382	11257
35°	6641	7763	9975
40°	4733	6270	8330
45°	2797	4963	6461
50°	2015	3591	4395
55°	1683	2587	2217
60°	1365	2074	1882
65°	1113	1838	1729
70°	966	1791	1651
75°	913	1818	1640
80°	946	2168	1764
85°	1355	3515	2160

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6461 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	7.6
10°-20°	202.4	19.4
20°-30°	249.7	24.0
30°-40°	222.1	21.3
40°-50°	141.8	13.6
50°-60°	68.1	6.5
60°-70°	40.0	3.8
70°-80°	25.5	2.4
80°-90°	13.6	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°	530.8	51.0
0°-40°	752.9	72.3
0°-60°	962.7	92.4
0°-90°	1041.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1041.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	827	842	840	845	852	77
15°	683	699	718	752	777	190
25°	494	513	537	576	614	226
35°	295	318	345	397	443	183
45°	107	139	190	221	248	90
55°	52	68	80	78	69	47
65°	26	46	42	38	40	26
75°	13	28	26	24	23	14
85°	6	15	17	14	10	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	858.9	858.9	858.9	858.9	858.9
2.5°	847.4	861.4	852.5	852.5	855.0
5°	827.0	842.3	839.7	844.8	852.5
7.5°	797.6	814.2	816.8	830.8	842.3
10°	763.2	781.0	788.7	809.1	824.4
12.5°	724.9	742.7	756.8	782.3	804.0
15°	682.8	699.3	718.5	751.7	777.2
17.5°	636.8	658.5	677.6	712.1	741.5
20°	590.9	611.3	634.3	667.4	700.6
22.5°	543.7	562.8	585.8	620.2	658.5
25°	493.9	513.0	537.3	575.6	613.8
27.5°	445.4	464.5	487.5	529.6	570.5
30°	395.6	414.8	440.3	483.7	528.3
32.5°	345.8	366.3	391.8	439.0	486.2
35°	294.8	317.8	344.6	396.9	442.8
37.5°	245.0	268.0	301.2	352.2	395.6
40°	196.5	223.3	260.3	306.3	345.8
42.5°	149.3	178.7	224.6	261.6	296.1
45°	107.2	139.1	190.2	220.8	247.6
47.5°	81.7	104.6	157.0	181.2	200.4
50°	70.2	84.2	125.1	142.9	153.1
52.5°	61.3	74.0	99.5	108.5	108.5
55°	52.3	67.6	80.4	77.8	68.9
57.5°	44.7	61.3	66.4	56.2	58.7
60°	37.0	56.2	56.2	49.8	51.0
62.5°	30.6	52.3	48.5	43.4	44.7
65°	25.5	45.9	42.1	38.3	39.6
67.5°	20.4	40.8	37.0	34.5	34.5
70°	17.9	37.0	33.2	30.6	30.6
72.5°	15.3	31.9	29.4	26.8	26.8
75°	12.8	28.1	25.5	24.2	23.0
77.5°	11.5	24.2	23.0	20.4	19.1
80°	8.9	20.4	20.4	19.1	16.6
82.5°	7.7	17.9	17.9	16.6	14.0
85°	6.4	15.3	16.6	14.0	10.2
87.5°	5.1	14.0	14.0	11.5	7.7
90°	0.0	0.0	0.0	0.0	0.0



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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	11.28	12.55	11.64	12.87	13.18	11.07	12.34	11.43	12.66	12.97
	3H	12.51	13.64	12.89	13.97	14.34	12.66	13.79	13.04	14.12	14.49
	4H	12.96	14.02	13.36	14.37	14.75	13.37	14.43	13.78	14.78	15.17
	6H	13.34	14.31	13.75	14.68	15.08	14.02	15.00	14.44	15.37	15.76
	8H	13.49	14.41	13.92	14.81	15.21	14.35	15.27	14.78	15.66	16.07
	12H	13.65	14.53	14.08	14.92	15.35	14.65	15.53	15.08	15.91	16.34
4H	2H	11.82	12.88	12.23	13.23	13.62	11.66	12.72	12.06	13.07	13.45
	3H	13.52	14.39	13.93	14.79	15.20	13.49	14.36	13.91	14.77	15.17
	4H	14.31	15.09	14.75	15.51	15.96	14.37	15.15	14.80	15.57	16.01
	6H	14.95	15.63	15.42	16.08	16.54	15.21	15.89	15.67	16.33	16.80
	8H	15.20	15.84	15.67	16.29	16.76	15.63	16.27	16.10	16.71	17.18
	12H	15.45	16.01	15.94	16.50	16.97	16.03	16.59	16.52	17.08	17.55
8H	4H	14.73	15.36	15.20	15.81	16.28	14.78	15.42	15.25	15.86	16.33
	6H	15.71	16.23	16.21	16.72	17.20	15.87	16.39	16.37	16.88	17.36
	8H	16.20	16.67	16.72	17.18	17.67	16.46	16.92	16.98	17.44	17.93
	12H	16.70	17.11	17.22	17.61	18.18	17.06	17.47	17.57	17.97	18.54
12H	4H	14.80	15.36	15.28	15.84	16.31	14.86	15.42	15.34	15.90	16.38
	6H	15.87	16.34	16.40	16.86	17.35	16.03	16.50	16.55	17.01	17.51
	8H	16.51	16.93	17.03	17.42	17.99	16.74	17.16	17.26	17.65	18.22