

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1057857

Luminaire Tested: S122RDRP-S1005D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057857
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: S122RDRP-S1005D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

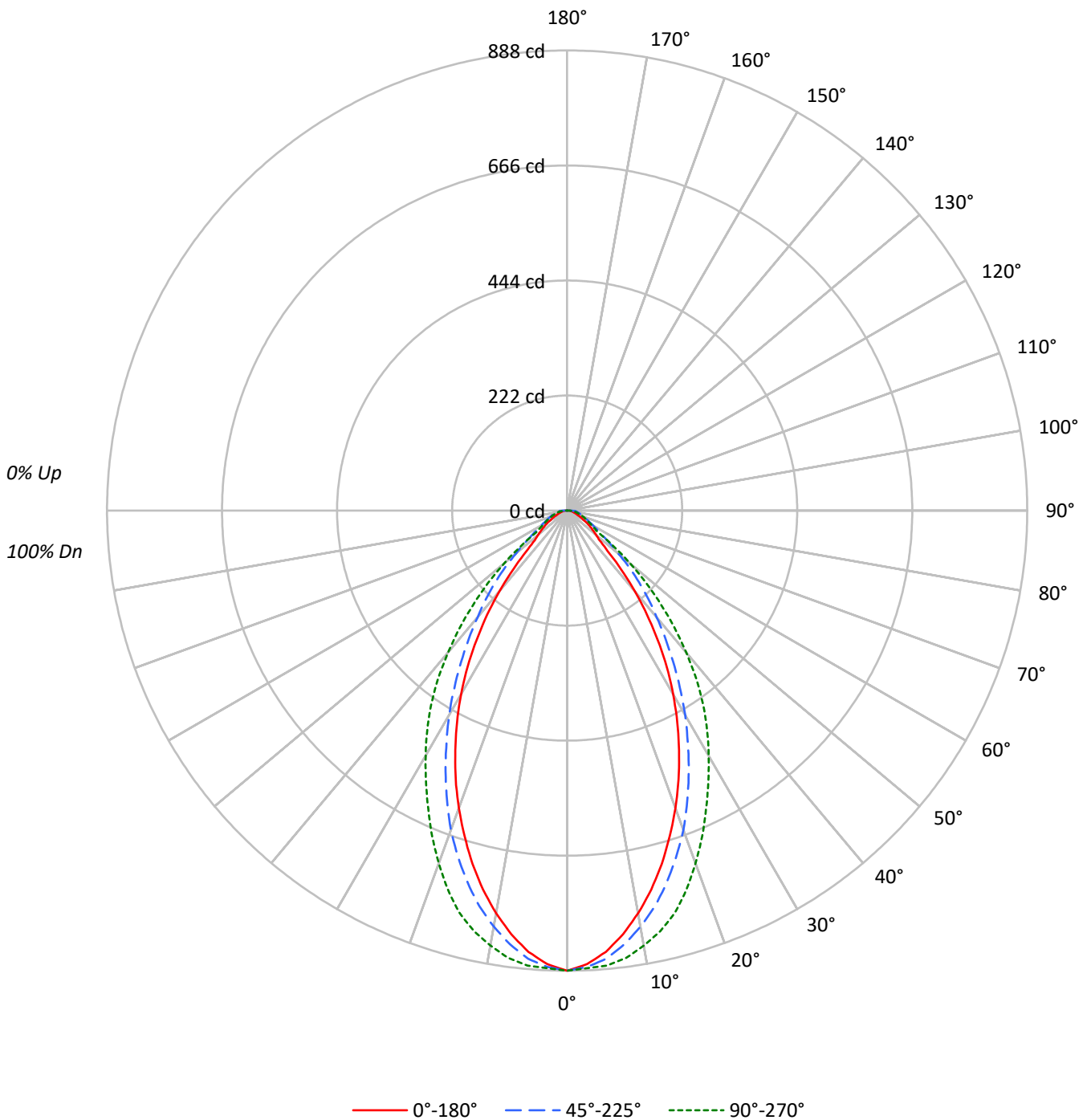
Lumens per Lamp: N/A
Luminaire Lumens: 1077.0 lumens
Efficiency: N/A
Efficacy: 25.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (A_{in}): 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	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°	16384	16384	16384
5°	15835	16080	16324
10°	14782	15276	15970
15°	13483	14190	15348
20°	11994	12876	14223
25°	10396	11308	12920
30°	8715	9699	11638
35°	6866	8024	10313
40°	4895	6482	8611
45°	2891	5130	6678
50°	2084	3712	4544
55°	1740	2673	2291
60°	1413	2140	1949
65°	1153	1899	1786
70°	998	1851	1710
75°	941	1882	1690
80°	978	2242	1828
85°	1397	3642	2244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6678 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	7.6
10°-20°	209.2	19.4
20°-30°	258.1	24.0
30°-40°	229.6	21.3
40°-50°	146.5	13.6
50°-60°	70.4	6.5
60°-70°	41.3	3.8
70°-80°	26.4	2.4
80°-90°	14.1	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°	548.7	51.0
0°-40°	778.3	72.3
0°-60°	995.2	92.4
0°-90°	1077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1077.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	888	888	888	888	888	
5°	855	871	868	873	881	79
15°	706	723	743	777	803	197
25°	511	530	555	595	635	234
35°	305	328	356	410	458	189
45°	111	144	197	228	256	93
55°	54	70	83	80	71	49
65°	26	48	44	40	41	27
75°	13	29	26	25	24	14
85°	7	16	17	14	11	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	887.9	887.9	887.9	887.9	887.9
2.5°	876.0	890.5	881.3	881.3	883.9
5°	854.9	870.7	868.1	873.4	881.3
7.5°	824.5	841.7	844.3	858.8	870.7
10°	788.9	807.4	815.3	836.4	852.3
12.5°	749.3	767.8	782.3	808.7	831.1
15°	705.8	723.0	742.8	777.1	803.4
17.5°	658.3	680.7	700.5	736.2	766.5
20°	610.8	631.9	655.7	690.0	724.3
22.5°	562.0	581.8	605.5	641.2	680.7
25°	510.6	530.3	555.4	595.0	634.6
27.5°	460.4	480.2	504.0	547.5	589.7
30°	409.0	428.8	455.2	500.0	546.2
32.5°	357.5	378.6	405.0	453.8	502.6
35°	304.8	328.5	356.2	410.3	457.8
37.5°	253.3	277.0	311.3	364.1	409.0
40°	203.2	230.9	269.1	316.6	357.5
42.5°	154.4	184.7	232.2	270.5	306.1
45°	110.8	143.8	196.6	228.2	255.9
47.5°	84.4	108.2	162.3	187.3	207.1
50°	72.6	87.1	129.3	147.8	158.3
52.5°	63.3	76.5	102.9	112.1	112.1
55°	54.1	69.9	83.1	80.5	71.2
57.5°	46.2	63.3	68.6	58.0	60.7
60°	38.3	58.0	58.0	51.5	52.8
62.5°	31.7	54.1	50.1	44.9	46.2
65°	26.4	47.5	43.5	39.6	40.9
67.5°	21.1	42.2	38.3	35.6	35.6
70°	18.5	38.3	34.3	31.7	31.7
72.5°	15.8	33.0	30.3	27.7	27.7
75°	13.2	29.0	26.4	25.1	23.7
77.5°	11.9	25.1	23.7	21.1	19.8
80°	9.2	21.1	21.1	19.8	17.2
82.5°	7.9	18.5	18.5	17.2	14.5
85°	6.6	15.8	17.2	14.5	10.6
87.5°	5.3	14.5	14.5	11.9	7.9
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	11.38	12.66	11.75	12.97	13.29	11.17	12.45	11.54	12.76	13.08
	3H	12.62	13.75	13.00	14.08	14.45	12.77	13.90	13.15	14.23	14.60
	4H	13.07	14.13	13.47	14.48	14.86	13.48	14.54	13.89	14.89	15.28
	6H	13.45	14.42	13.87	14.80	15.19	14.14	15.11	14.55	15.48	15.88
	8H	13.60	14.53	14.04	14.92	15.32	14.47	15.39	14.90	15.78	16.19
	12H	13.76	14.64	14.19	15.03	15.46	14.77	15.65	15.20	16.03	16.46
4H	2H	11.93	12.99	12.34	13.34	13.73	11.77	12.82	12.17	13.18	13.56
	3H	13.63	14.50	14.04	14.91	15.31	13.60	14.48	14.02	14.88	15.28
	4H	14.42	15.21	14.86	15.63	16.07	14.48	15.26	14.91	15.68	16.12
	6H	15.07	15.75	15.53	16.19	16.66	15.33	16.00	15.79	16.45	16.92
	8H	15.32	15.95	15.79	16.40	16.87	15.75	16.38	16.22	16.83	17.30
	12H	15.56	16.12	16.05	16.61	17.08	16.15	16.71	16.64	17.20	17.67
8H	4H	14.84	15.48	15.31	15.92	16.39	14.90	15.53	15.37	15.98	16.45
	6H	15.82	16.34	16.32	16.84	17.32	15.98	16.50	16.49	17.00	17.48
	8H	16.31	16.78	16.83	17.30	17.79	16.58	17.04	17.10	17.56	18.05
	12H	16.81	17.23	17.33	17.72	18.29	17.18	17.59	17.70	18.09	18.66
12H	4H	14.91	15.47	15.40	15.95	16.43	14.97	15.53	15.46	16.02	16.49
	6H	15.99	16.46	16.51	16.97	17.46	16.15	16.62	16.67	17.13	17.62
	8H	16.63	17.04	17.14	17.53	18.11	16.86	17.28	17.38	17.77	18.34