

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: P1057812

Luminaire Tested: S122RDRP-S1005D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S122RDRP-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

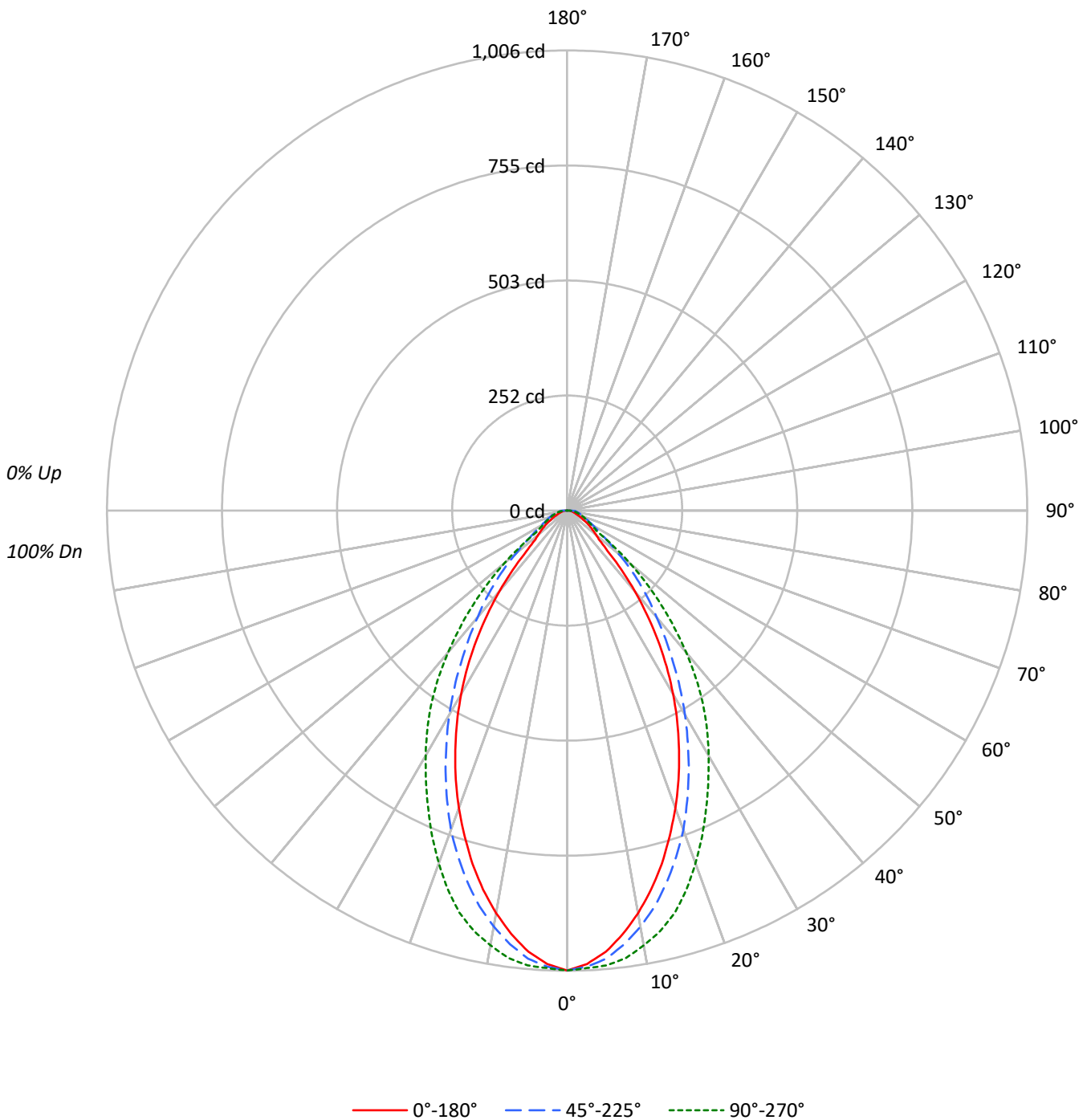
Lumens per Lamp: N/A
Luminaire Lumens: 1219.7 lumens
Efficiency: N/A
Efficacy: 29.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (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°	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



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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	



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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



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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	11.82	13.09	12.18	13.41	13.72	11.61	12.88	11.97	13.19	13.51
	3H	13.05	14.18	13.43	14.51	14.88	13.20	14.33	13.58	14.66	15.03
	4H	13.50	14.56	13.90	14.91	15.29	13.92	14.98	14.32	15.33	15.71
	6H	13.88	14.85	14.30	15.23	15.62	14.57	15.54	14.98	15.91	16.31
	8H	14.04	14.96	14.47	15.35	15.76	14.90	15.82	15.33	16.21	16.62
	12H	14.20	15.08	14.63	15.46	15.89	15.20	16.08	15.63	16.46	16.89
4H	2H	12.37	13.43	12.77	13.78	14.16	12.20	13.26	12.60	13.61	13.99
	3H	14.06	14.93	14.47	15.34	15.74	14.04	14.91	14.45	15.31	15.72
	4H	14.86	15.64	15.29	16.06	16.50	14.91	15.69	15.35	16.11	16.56
	6H	15.50	16.18	15.96	16.62	17.09	15.76	16.43	16.22	16.88	17.35
	8H	15.75	16.38	16.22	16.83	17.30	16.18	16.81	16.65	17.26	17.73
	12H	16.00	16.56	16.49	17.04	17.52	16.58	17.14	17.07	17.63	18.10
8H	4H	15.28	15.91	15.75	16.36	16.83	15.33	15.96	15.80	16.41	16.88
	6H	16.25	16.77	16.76	17.27	17.75	16.41	16.93	16.92	17.43	17.91
	8H	16.74	17.21	17.27	17.73	18.22	17.01	17.47	17.53	17.99	18.48
	12H	17.25	17.66	17.76	18.16	18.73	17.61	18.02	18.12	18.52	19.09
12H	4H	15.34	15.90	15.83	16.39	16.86	15.41	15.97	15.89	16.45	16.92
	6H	16.42	16.89	16.94	17.40	17.90	16.58	17.05	17.10	17.56	18.05
	8H	17.06	17.47	17.57	17.97	18.54	17.29	17.70	17.80	18.20	18.77