

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: P1058561

Luminaire Tested: S122RDR-H865D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058561
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H865D927-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

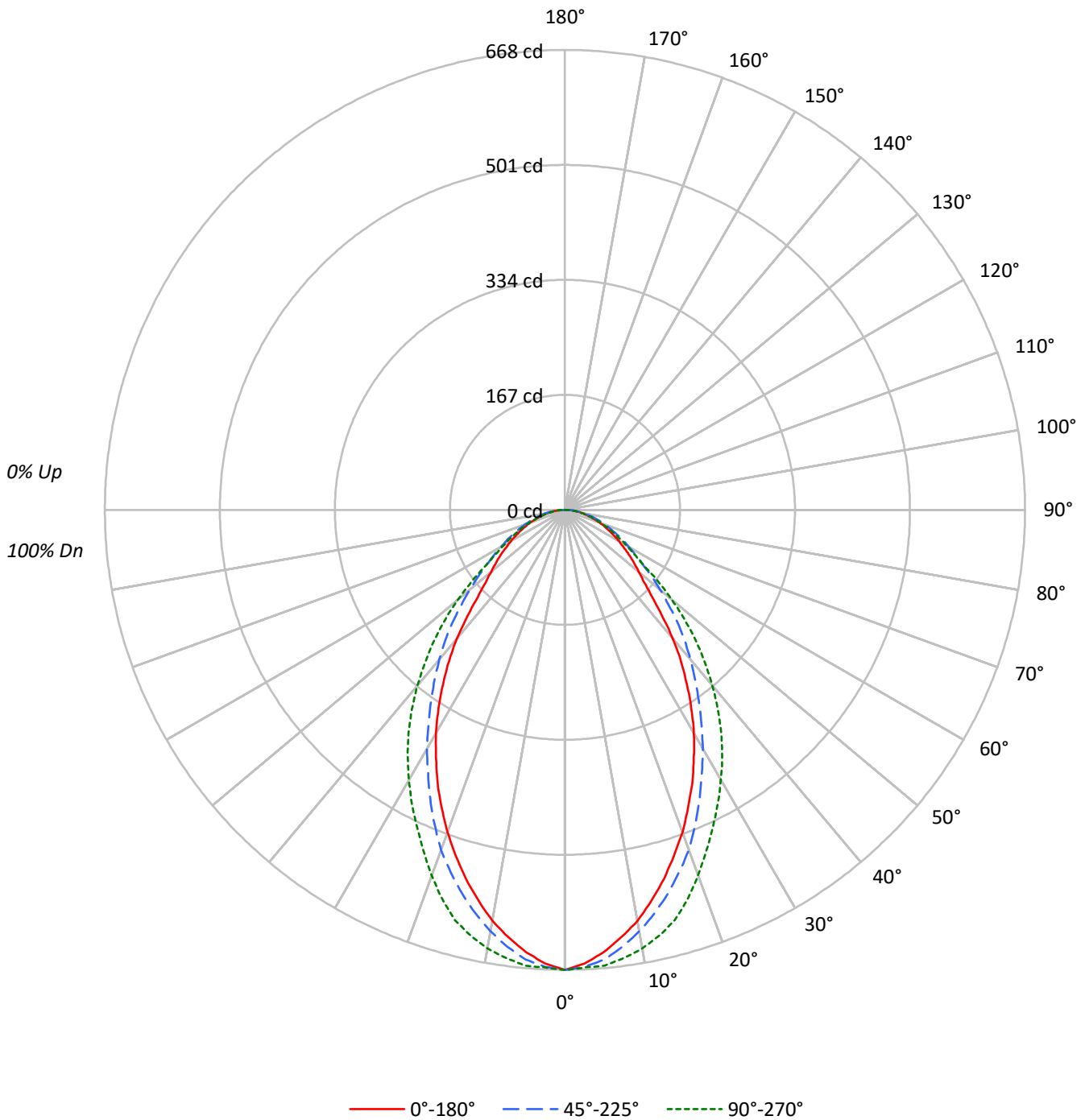
Lumens per Lamp: N/A
Luminaire Lumens: 1088.1 lumens
Efficiency: N/A
Efficacy: 34.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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				
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12330	12330	12330
5°	11945	12144	12305
10°	11358	11649	12121
15°	10599	11025	11783
20°	9789	10323	11103
25°	8905	9419	10347
30°	7977	8533	9650
35°	6947	7625	8914
40°	5863	6822	8014
45°	4658	6023	7009
50°	4010	5179	5819
55°	3651	4430	4462
60°	3329	3938	3794
65°	3048	3558	3345
70°	2827	3296	2984
75°	2631	3108	2631
80°	2476	2986	2370
85°	2456	3070	2054

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7009 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.7	5.7
10°-20°	163.1	15.0
20°-30°	214.6	19.7
30°-40°	215.8	19.8
40°-50°	174.9	16.1
50°-60°	120.5	11.1
60°-70°	78.8	7.2
70°-80°	43.9	4.0
80°-90°	14.9	1.4
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°	439.3	40.4
0°-40°	655.1	60.2
0°-60°	950.5	87.4
0°-90°	1088.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1088.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	645	658	656	658	664	60
15°	555	568	577	598	617	155
25°	437	449	463	483	508	200
35°	308	323	338	368	396	192
45°	178	199	231	251	269	141
55°	114	126	138	141	139	102
65°	70	83	82	78	77	70
75°	37	46	44	39	37	39
85°	12	16	14	13	10	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	668.2	668.2	668.2	668.2	668.2
2.5°	659.5	671.1	664.3	664.3	665.3
5°	644.9	657.6	655.6	658.5	664.3
7.5°	626.5	640.1	640.1	648.8	656.6
10°	606.2	619.7	621.7	635.2	646.9
12.5°	580.9	594.5	600.3	617.8	633.3
15°	554.8	568.3	577.1	598.4	616.8
17.5°	526.6	540.2	551.8	574.1	592.6
20°	498.5	511.1	525.7	545.1	565.4
22.5°	467.5	481.0	494.6	513.0	536.3
25°	437.4	449.0	462.6	483.0	508.2
27.5°	405.4	418.0	430.6	454.9	481.0
30°	374.4	387.0	400.5	425.8	452.9
32.5°	341.4	355.0	368.5	396.7	424.8
35°	308.4	323.0	338.5	368.5	395.7
37.5°	276.4	291.9	310.4	341.4	364.7
40°	243.4	259.9	283.2	310.4	332.7
42.5°	208.5	228.9	257.0	280.3	300.7
45°	178.5	198.8	230.8	251.2	268.6
47.5°	156.1	172.6	203.7	221.1	235.7
50°	139.7	152.3	180.4	193.0	202.7
52.5°	126.1	138.7	158.1	166.8	169.7
55°	113.5	126.1	137.7	140.6	138.7
57.5°	100.9	114.4	121.2	118.3	118.3
60°	90.2	104.7	106.7	102.8	102.8
62.5°	79.5	94.1	94.1	89.2	89.2
65°	69.8	83.4	81.5	77.6	76.6
67.5°	61.1	73.7	70.8	66.9	65.9
70°	52.4	64.0	61.1	56.3	55.3
72.5°	44.6	55.3	51.4	47.5	45.6
75°	36.9	45.6	43.6	38.8	36.9
77.5°	30.1	36.9	34.9	31.0	29.1
80°	23.3	29.1	28.1	24.2	22.3
82.5°	17.5	22.3	21.3	18.4	15.5
85°	11.6	15.5	14.5	12.6	9.7
87.5°	5.8	10.7	9.7	8.7	4.8
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	15.46	16.90	15.82	17.21	17.52	15.82	17.26	16.18	17.57	17.88
	3H	17.00	18.29	17.38	18.62	18.98	17.16	18.45	17.54	18.78	19.14
	4H	17.57	18.78	17.97	19.13	19.51	17.65	18.85	18.05	19.20	19.58
	6H	18.00	19.12	18.42	19.49	19.88	18.00	19.11	18.41	19.48	19.88
	8H	18.16	19.22	18.59	19.61	20.01	18.12	19.18	18.54	19.57	19.97
	12H	18.27	19.29	18.70	19.67	20.10	18.19	19.20	18.62	19.59	20.02
4H	2H	16.04	17.25	16.44	17.60	17.98	16.33	17.54	16.73	17.89	18.27
	3H	17.86	18.87	18.28	19.27	19.67	17.90	18.91	18.32	19.31	19.71
	4H	18.61	19.51	19.05	19.93	20.37	18.51	19.41	18.94	19.83	20.27
	6H	19.20	19.98	19.66	20.43	20.89	18.99	19.77	19.45	20.22	20.68
	8H	19.41	20.14	19.88	20.59	21.06	19.15	19.88	19.62	20.33	20.80
	12H	19.58	20.23	20.06	20.71	21.18	19.27	19.93	19.76	20.41	20.88
8H	4H	18.90	19.63	19.36	20.07	20.54	18.81	19.54	19.27	19.99	20.45
	6H	19.65	20.26	20.15	20.75	21.23	19.43	20.03	19.92	20.52	21.00
	8H	19.98	20.52	20.49	21.03	21.52	19.67	20.22	20.19	20.73	21.22
	12H	20.26	20.74	20.77	21.24	21.80	19.89	20.36	20.40	20.86	21.42
12H	4H	18.92	19.57	19.40	20.05	20.52	18.84	19.50	19.33	19.98	20.45
	6H	19.71	20.26	20.23	20.77	21.26	19.50	20.05	20.02	20.56	21.05
	8H	20.11	20.59	20.62	21.08	21.65	19.82	20.30	20.33	20.79	21.36