

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: P1057859

Luminaire Tested: S122RDRP-S1005D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057859
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: S122RDRP-S1005D940-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

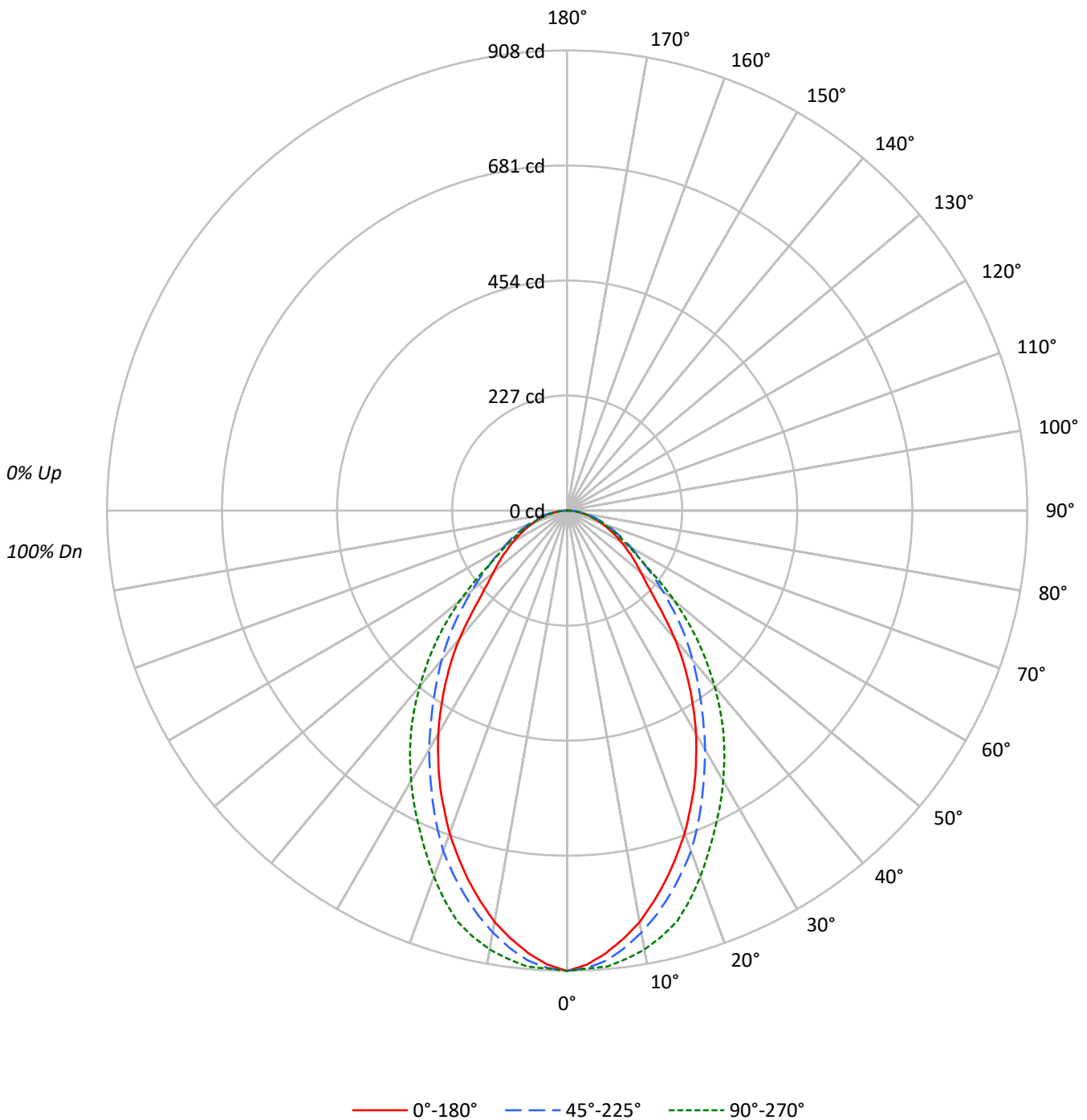
Lumens per Lamp: N/A
Luminaire Lumens: 1479.2 lumens
Efficiency: N/A
Efficacy: 35.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	16762	16762	16762
5°	16239	16508	16728
10°	15439	15835	16477
15°	14406	14985	16018
20°	13306	14032	15093
25°	12106	12804	14065
30°	10843	11602	13119
35°	9443	10364	12117
40°	7971	9274	10893
45°	6331	8189	9530
50°	5449	7039	7909
55°	4961	6022	6064
60°	4525	5351	5156
65°	4144	4833	4550
70°	3841	4483	4052
75°	3572	4228	3572
80°	3358	4059	3220
85°	3345	4192	2795

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9530 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.8	5.7
10°-20°	221.7	15.0
20°-30°	291.7	19.7
30°-40°	293.3	19.8
40°-50°	237.7	16.1
50°-60°	163.7	11.1
60°-70°	107.2	7.2
70°-80°	59.7	4.0
80°-90°	20.2	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°	597.2	40.4
0°-40°	890.6	60.2
0°-60°	1292.1	87.4
0°-90°	1479.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1479.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	908	908	908	908	908	
5°	877	894	891	895	903	82
15°	754	773	784	813	838	211
25°	595	610	629	656	691	272
35°	419	439	460	501	538	261
45°	243	270	314	342	365	192
55°	154	171	187	191	188	138
65°	95	113	111	106	104	95
75°	50	62	59	53	50	54
85°	16	21	20	17	13	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	908.4	908.4	908.4	908.4	908.4
2.5°	896.5	912.3	903.1	903.1	904.4
5°	876.7	893.9	891.2	895.2	903.1
7.5°	851.7	870.1	870.1	882.0	892.5
10°	824.0	842.4	845.1	863.5	879.4
12.5°	789.7	808.2	816.1	839.8	860.9
15°	754.1	772.6	784.4	813.4	838.5
17.5°	715.9	734.3	750.2	780.5	805.5
20°	677.6	694.8	714.6	740.9	768.6
22.5°	635.5	653.9	672.4	697.4	729.1
25°	594.6	610.4	628.9	656.5	690.8
27.5°	551.1	568.2	585.4	618.3	653.9
30°	508.9	526.0	544.5	578.8	615.7
32.5°	464.1	482.5	501.0	539.2	577.4
35°	419.2	439.0	460.1	501.0	537.9
37.5°	375.7	396.8	421.9	464.1	495.7
40°	330.9	353.3	385.0	421.9	452.2
42.5°	283.5	311.1	349.4	381.0	408.7
45°	242.6	270.3	313.8	341.5	365.2
47.5°	212.3	234.7	276.9	300.6	320.4
50°	189.8	207.0	245.2	262.4	275.5
52.5°	171.4	188.5	214.9	226.8	230.7
55°	154.2	171.4	187.2	191.2	188.5
57.5°	137.1	155.6	164.8	160.8	160.8
60°	122.6	142.4	145.0	139.7	139.7
62.5°	108.1	127.9	127.9	121.3	121.3
65°	94.9	113.4	110.7	105.5	104.2
67.5°	83.1	100.2	96.2	91.0	89.6
70°	71.2	87.0	83.1	76.5	75.1
72.5°	60.6	75.1	69.9	64.6	62.0
75°	50.1	62.0	59.3	52.7	50.1
77.5°	40.9	50.1	47.5	42.2	39.6
80°	31.6	39.6	38.2	33.0	30.3
82.5°	23.7	30.3	29.0	25.0	21.1
85°	15.8	21.1	19.8	17.1	13.2
87.5°	7.9	14.5	13.2	11.9	6.6
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	16.52	17.97	16.89	18.28	18.59	16.88	18.32	17.25	18.64	18.95
	3H	18.07	19.36	18.45	19.69	20.05	18.23	19.52	18.61	19.85	20.21
	4H	18.64	19.85	19.04	20.20	20.58	18.71	19.92	19.11	20.27	20.65
	6H	19.07	20.19	19.48	20.55	20.95	19.07	20.18	19.48	20.55	20.94
	8H	19.22	20.28	19.65	20.67	21.08	19.18	20.24	19.61	20.63	21.03
	12H	19.34	20.35	19.77	20.74	21.17	19.26	20.27	19.69	20.65	21.08
4H	2H	17.11	18.32	17.51	18.67	19.05	17.40	18.60	17.80	18.95	19.33
	3H	18.93	19.93	19.34	20.33	20.74	18.97	19.97	19.38	20.37	20.77
	4H	19.68	20.58	20.11	21.00	21.44	19.57	20.47	20.01	20.89	21.33
	6H	20.27	21.05	20.73	21.49	21.96	20.06	20.84	20.52	21.28	21.75
	8H	20.48	21.21	20.94	21.65	22.12	20.22	20.95	20.69	21.40	21.87
	12H	20.64	21.30	21.13	21.78	22.25	20.34	20.99	20.83	21.47	21.95
8H	4H	19.96	20.70	20.43	21.14	21.61	19.87	20.61	20.34	21.05	21.52
	6H	20.72	21.32	21.22	21.82	22.30	20.49	21.10	20.99	21.59	22.07
	8H	21.04	21.59	21.56	22.10	22.59	20.74	21.28	21.26	21.80	22.29
	12H	21.33	21.81	21.84	22.30	22.87	20.95	21.43	21.46	21.93	22.49
12H	4H	19.98	20.64	20.47	21.12	21.59	19.91	20.56	20.39	21.04	21.51
	6H	20.78	21.32	21.30	21.84	22.32	20.57	21.11	21.09	21.63	22.11
	8H	21.18	21.66	21.69	22.15	22.72	20.89	21.37	21.40	21.86	22.43