

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: P1057814

Luminaire Tested: S122RDRP-S1005D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057814
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-S1005D840-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, 80 CRI LEDS
Ballast/Driver: -

Summary

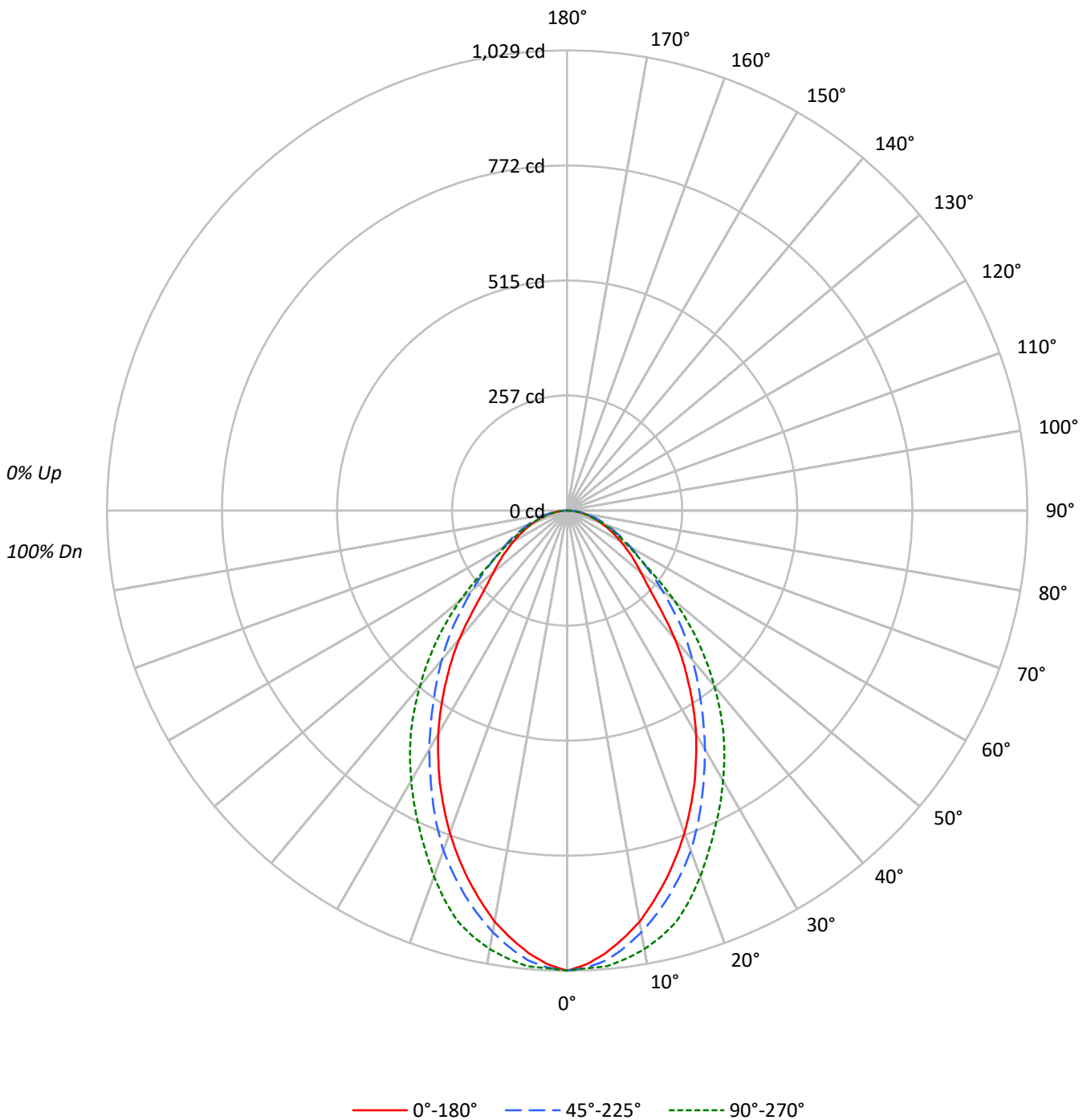
Lumens per Lamp: N/A
Luminaire Lumens: 1675.1 lumens
Efficiency: N/A
Efficacy: 40.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (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	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°	18982	18982	18982
5°	18391	18695	18943
10°	17485	17933	18660
15°	16314	16971	18141
20°	15069	15890	17094
25°	13710	14500	15930
30°	12279	13138	14857
35°	10695	11738	13723
40°	9028	10502	12335
45°	7168	9272	10793
50°	6172	7972	8959
55°	5620	6820	6868
60°	5126	6060	5842
65°	4694	5475	5152
70°	4348	5077	4591
75°	4042	4791	4042
80°	3804	4601	3645
85°	3790	4742	3155

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10793 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.9	5.7
10°-20°	251.0	15.0
20°-30°	330.4	19.7
30°-40°	332.2	19.8
40°-50°	269.2	16.1
50°-60°	185.5	11.1
60°-70°	121.4	7.2
70°-80°	67.6	4.0
80°-90°	22.9	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°	676.4	40.4
0°-40°	1008.6	60.2
0°-60°	1463.3	87.4
0°-90°	1675.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1675.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1029	1029	1029	1029	1029	
5°	993	1012	1009	1014	1023	93
15°	854	875	888	921	950	239
25°	673	691	712	744	782	309
35°	475	497	521	567	609	296
45°	275	306	355	387	414	217
55°	175	194	212	216	214	157
65°	108	128	125	119	118	107
75°	57	70	67	60	57	61
85°	18	24	22	19	15	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1028.7	1028.7	1028.7	1028.7	1028.7
2.5°	1015.3	1033.2	1022.7	1022.7	1024.2
5°	992.9	1012.3	1009.3	1013.8	1022.7
7.5°	964.5	985.4	985.4	998.9	1010.8
10°	933.2	954.1	957.1	978.0	995.9
12.5°	894.3	915.2	924.2	951.1	975.0
15°	854.0	874.9	888.4	921.2	949.6
17.5°	810.7	831.6	849.6	883.9	912.3
20°	767.4	786.8	809.2	839.1	870.5
22.5°	719.7	740.6	761.5	789.8	825.7
25°	673.4	691.3	712.2	743.5	782.4
27.5°	624.1	643.5	662.9	700.2	740.6
30°	576.3	595.7	616.6	655.5	697.3
32.5°	525.6	546.5	567.4	610.7	654.0
35°	474.8	497.2	521.1	567.4	609.2
37.5°	425.5	449.4	477.8	525.6	561.4
40°	374.8	400.1	436.0	477.8	512.1
42.5°	321.0	352.4	395.7	431.5	462.8
45°	274.7	306.1	355.3	386.7	413.6
47.5°	240.4	265.8	313.5	340.4	362.8
50°	215.0	234.4	277.7	297.1	312.1
52.5°	194.1	213.5	243.4	256.8	261.3
55°	174.7	194.1	212.0	216.5	213.5
57.5°	155.3	176.2	186.6	182.2	182.2
60°	138.9	161.3	164.2	158.3	158.3
62.5°	122.4	144.8	144.8	137.4	137.4
65°	107.5	128.4	125.4	119.4	118.0
67.5°	94.1	113.5	109.0	103.0	101.5
70°	80.6	98.5	94.1	86.6	85.1
72.5°	68.7	85.1	79.1	73.2	70.2
75°	56.7	70.2	67.2	59.7	56.7
77.5°	46.3	56.7	53.8	47.8	44.8
80°	35.8	44.8	43.3	37.3	34.3
82.5°	26.9	34.3	32.8	28.4	23.9
85°	17.9	23.9	22.4	19.4	14.9
87.5°	9.0	16.4	14.9	13.4	7.5
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	16.96	18.40	17.32	18.71	19.03	17.32	18.76	17.68	19.07	19.39
	3H	18.50	19.79	18.88	20.12	20.48	18.66	19.95	19.04	20.28	20.64
	4H	19.07	20.28	19.47	20.63	21.01	19.14	20.35	19.55	20.70	21.08
	6H	19.50	20.62	19.92	20.99	21.38	19.50	20.61	19.91	20.98	21.37
	8H	19.66	20.72	20.08	21.11	21.51	19.62	20.68	20.04	21.07	21.47
	12H	19.77	20.79	20.20	21.17	21.60	19.69	20.70	20.12	21.09	21.52
4H	2H	17.54	18.75	17.94	19.10	19.48	17.83	19.04	18.23	19.39	19.77
	3H	19.36	20.37	19.78	20.77	21.17	19.40	20.41	19.82	20.81	21.21
	4H	20.11	21.01	20.55	21.43	21.87	20.01	20.91	20.44	21.33	21.77
	6H	20.70	21.48	21.16	21.92	22.39	20.49	21.27	20.95	21.72	22.18
	8H	20.91	21.64	21.37	22.08	22.55	20.65	21.38	21.12	21.83	22.30
	12H	21.08	21.73	21.56	22.21	22.68	20.77	21.43	21.26	21.91	22.38
8H	4H	20.40	21.13	20.86	21.57	22.04	20.31	21.04	20.77	21.49	21.95
	6H	21.15	21.76	21.65	22.25	22.73	20.93	21.53	21.42	22.02	22.50
	8H	21.48	22.02	21.99	22.53	23.02	21.18	21.72	21.69	22.23	22.72
	12H	21.76	22.24	22.27	22.73	23.30	21.39	21.87	21.90	22.36	22.93
12H	4H	20.42	21.07	20.90	21.55	22.02	20.34	21.00	20.83	21.48	21.95
	6H	21.21	21.75	21.73	22.27	22.76	21.00	21.55	21.52	22.06	22.55
	8H	21.61	22.09	22.12	22.58	23.15	21.32	21.80	21.83	22.30	22.86