

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: P1057814

Luminaire Tested: S122RDR-S1005D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S122RDR-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

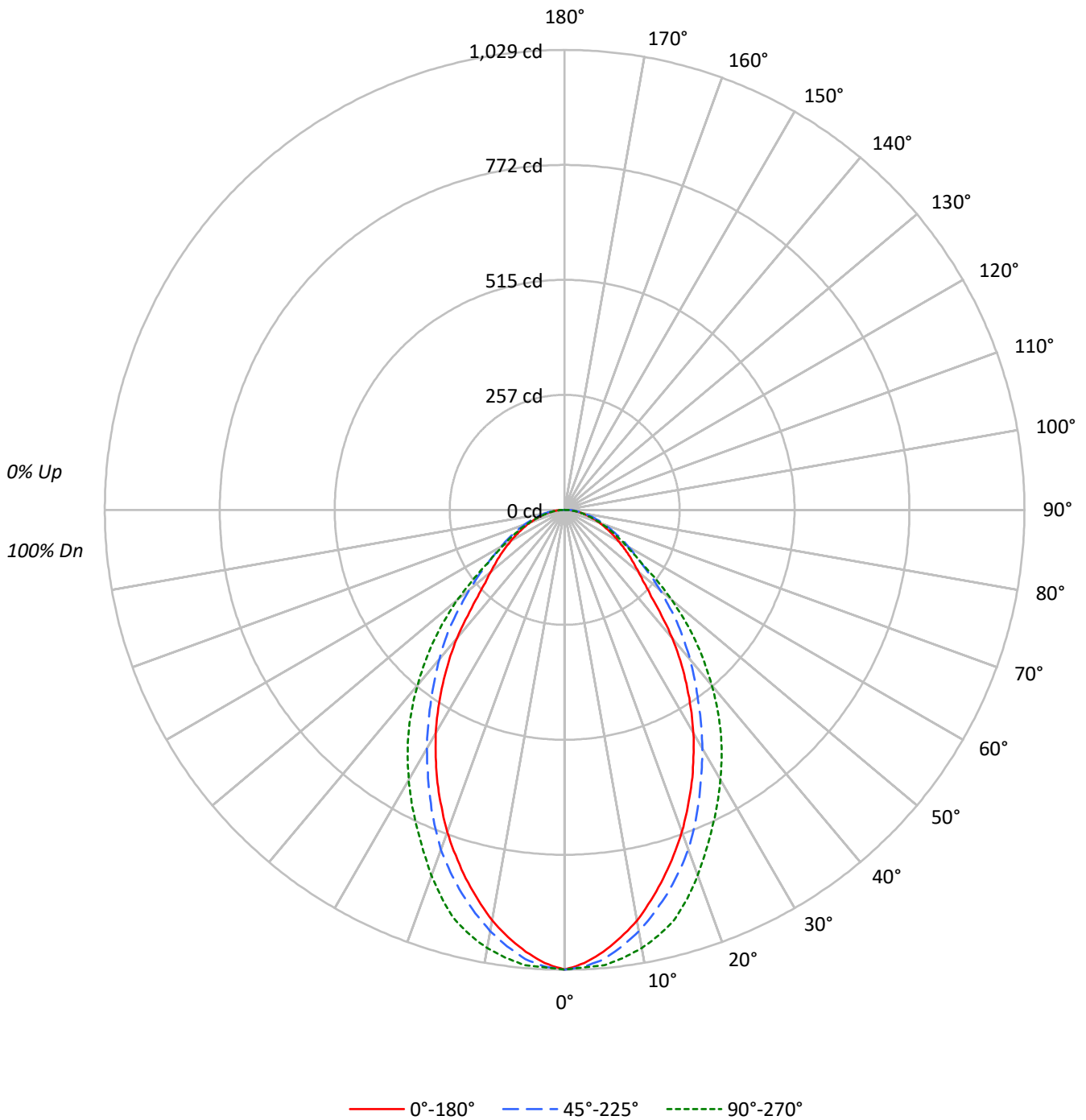
Lumens per Lamp: N/A
Luminaire Lumens: 1675.1 lumens
Efficiency: N/A
Efficacy: 40.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

(END OF REPORT)