

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: P1058136

Luminaire Tested: S122RDR-S865D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058136
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: S122RDR-S865D840-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

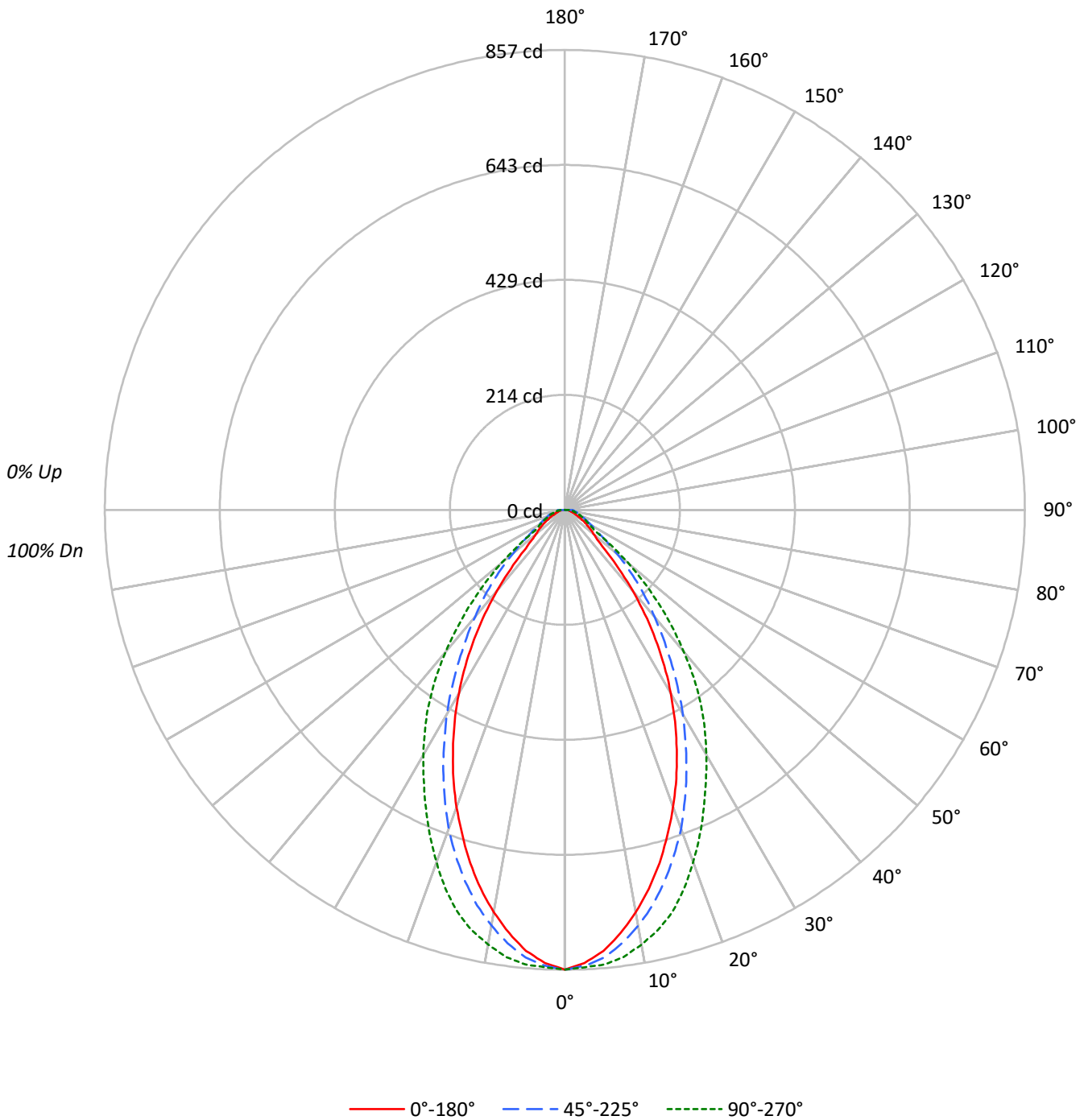
Lumens per Lamp: N/A
Luminaire Lumens: 1039.3 lumens
Efficiency: N/A
Efficacy: 29.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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

TEST NUMBER: P1058136

CATALOG NUMBER: S122RDR-S865D840-X4F0-XX-UDD-SVL-W

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				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°	15810	15810	15810
5°	15281	15517	15752
10°	14265	14742	15409
15°	13011	13691	14811
20°	11574	12424	13724
25°	10031	10913	12468
30°	8410	9358	11231
35°	6625	7742	9952
40°	4724	6256	8310
45°	2790	4950	6446
50°	2009	3583	4386
55°	1679	2580	2210
60°	1362	2067	1878
65°	1113	1834	1725
70°	960	1786	1651
75°	905	1818	1633
80°	946	2168	1764
85°	1355	3515	2160

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6446 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.6	7.6
10°-20°	201.9	19.4
20°-30°	249.1	24.0
30°-40°	221.5	21.3
40°-50°	141.4	13.6
50°-60°	67.9	6.5
60°-70°	39.9	3.8
70°-80°	25.5	2.4
80°-90°	13.6	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°	529.5	51.0
0°-40°	751.1	72.3
0°-60°	960.4	92.4
0°-90°	1039.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1039.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	857	857	857	857	857	
5°	825	840	838	843	850	77
15°	681	698	717	750	775	190
25°	493	512	536	574	612	225
35°	294	317	344	396	442	183
45°	107	139	190	220	247	90
55°	52	68	80	78	69	47
65°	26	46	42	38	40	26
75°	13	28	26	24	23	14
85°	6	15	17	14	10	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	856.8	856.8	856.8	856.8	856.8
2.5°	845.3	859.3	850.4	850.4	853.0
5°	825.0	840.2	837.7	842.8	850.4
7.5°	795.7	812.2	814.8	828.8	840.2
10°	761.3	779.1	786.8	807.1	822.4
12.5°	723.1	740.9	754.9	780.4	802.0
15°	681.1	697.6	716.7	749.8	775.3
17.5°	635.3	656.9	676.0	710.4	739.7
20°	589.4	609.8	632.7	665.8	698.9
22.5°	542.3	561.4	584.3	618.7	656.9
25°	492.7	511.8	536.0	574.2	612.4
27.5°	444.3	463.4	486.3	528.3	569.1
30°	394.7	413.8	439.2	482.5	527.1
32.5°	345.0	365.4	390.8	437.9	485.0
35°	294.1	317.0	343.7	395.9	441.8
37.5°	244.4	267.3	300.4	351.4	394.7
40°	196.1	222.8	259.7	305.5	345.0
42.5°	149.0	178.2	224.1	261.0	295.4
45°	106.9	138.8	189.7	220.2	247.0
47.5°	81.5	104.4	156.6	180.8	199.9
50°	70.0	84.0	124.8	142.6	152.8
52.5°	61.1	73.8	99.3	108.2	108.2
55°	52.2	67.5	80.2	77.7	68.7
57.5°	44.6	61.1	66.2	56.0	58.6
60°	36.9	56.0	56.0	49.7	50.9
62.5°	30.6	52.2	48.4	43.3	44.6
65°	25.5	45.8	42.0	38.2	39.5
67.5°	20.4	40.7	36.9	34.4	34.4
70°	17.8	36.9	33.1	30.6	30.6
72.5°	15.3	31.8	29.3	26.7	26.7
75°	12.7	28.0	25.5	24.2	22.9
77.5°	11.5	24.2	22.9	20.4	19.1
80°	8.9	20.4	20.4	19.1	16.6
82.5°	7.6	17.8	17.8	16.6	14.0
85°	6.4	15.3	16.6	14.0	10.2
87.5°	5.1	14.0	14.0	11.5	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)