

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: P1058132

Luminaire Tested: S122RDR-S865D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058132
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D840-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

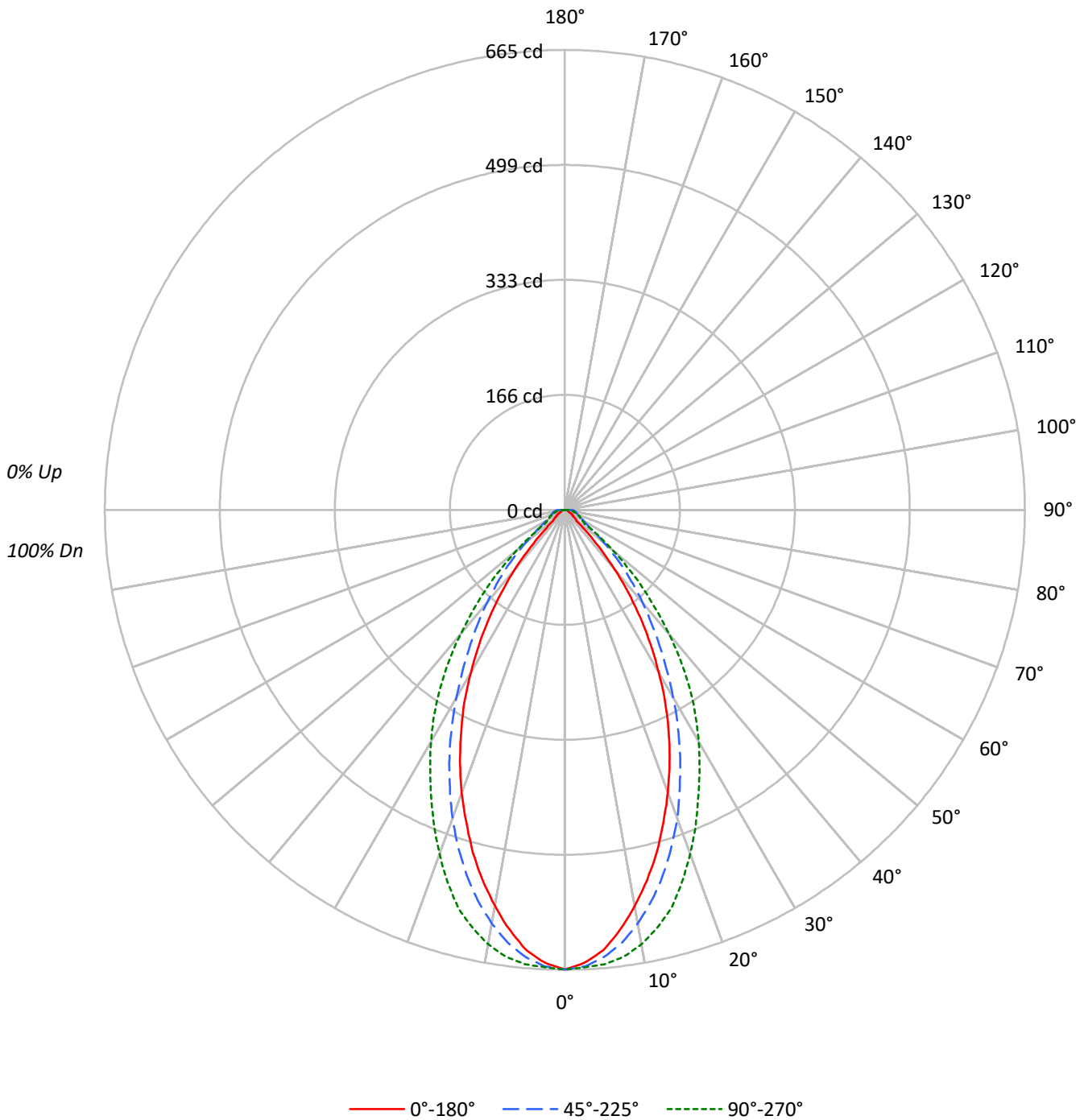
Lumens per Lamp: N/A
Luminaire Lumens: 716.3 lumens
Efficiency: N/A
Efficacy: 20.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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				100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61				61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57				57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52				52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48				48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45				45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42				42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12264	12264	12264
5°	11838	12027	12216
10°	10901	11379	11951
15°	9802	10457	11382
20°	8550	9325	10400
25°	7232	8036	9305
30°	5778	6673	8246
35°	4273	5364	7085
40°	2698	4201	5641
45°	1062	3155	4152
50°	548	2119	2558
55°	450	1393	1145
60°	328	1129	1033
65°	279	1057	1057
70°	275	1101	1030
75°	364	1269	1091
80°	542	1626	1222
85°	805	2689	1609

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 5373 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	8.5
10°-20°	153.5	21.4
20°-30°	182.4	25.5
30°-40°	151.8	21.2
40°-50°	84.8	11.8
50°-60°	34.3	4.8
60°-70°	21.9	3.1
70°-80°	16.4	2.3
80°-90°	10.5	1.5
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°	396.8	55.4
0°-40°	548.5	76.6
0°-60°	667.5	93.2
0°-90°	716.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	716.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	639	650	649	654	660	59
15°	513	528	547	575	596	143
25°	355	369	395	425	457	162
35°	190	208	238	278	314	118
45°	41	69	121	141	159	38
55°	14	29	43	42	36	12
65°	6	26	24	23	24	6
75°	5	18	18	17	15	5
85°	4	12	13	12	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	664.6	664.6	664.6	664.6	664.6
2.5°	655.6	665.8	660.7	660.7	662.0
5°	639.1	650.5	649.3	654.4	659.5
7.5°	612.4	625.1	631.4	642.9	651.8
10°	581.8	595.8	607.3	625.1	637.8
12.5°	548.7	562.7	579.3	602.2	618.7
15°	513.1	528.3	547.4	575.4	595.8
17.5°	473.6	490.1	511.8	542.3	564.0
20°	435.4	451.9	474.9	505.4	529.6
22.5°	395.9	409.9	434.1	464.7	494.0
25°	355.2	369.2	394.7	425.2	457.0
27.5°	314.5	328.5	353.9	385.7	421.4
30°	271.2	286.4	313.2	348.8	387.0
32.5°	230.4	245.7	273.7	313.2	351.4
35°	189.7	207.5	238.1	277.5	314.5
37.5°	150.2	170.6	205.0	241.9	275.0
40°	112.0	133.7	174.4	206.2	234.2
42.5°	73.8	99.3	146.4	173.1	194.8
45°	40.7	68.7	120.9	141.3	159.1
47.5°	22.9	44.6	95.5	112.0	122.2
50°	19.1	33.1	73.8	85.3	89.1
52.5°	15.3	30.6	56.0	62.4	59.8
55°	14.0	29.3	43.3	42.0	35.6
57.5°	11.5	29.3	34.4	30.6	30.6
60°	8.9	28.0	30.6	26.7	28.0
62.5°	7.6	26.7	28.0	25.5	25.5
65°	6.4	25.5	24.2	22.9	24.2
67.5°	5.1	22.9	22.9	21.6	21.6
70°	5.1	21.6	20.4	19.1	19.1
72.5°	5.1	19.1	19.1	17.8	17.8
75°	5.1	17.8	17.8	16.6	15.3
77.5°	5.1	15.3	16.6	15.3	14.0
80°	5.1	14.0	15.3	14.0	11.5
82.5°	5.1	12.7	14.0	12.7	10.2
85°	3.8	11.5	12.7	11.5	7.6
87.5°	3.8	11.5	12.7	10.2	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)