

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: P1058132

Luminaire Tested: S122RDRP-S865D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S122RDRP-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

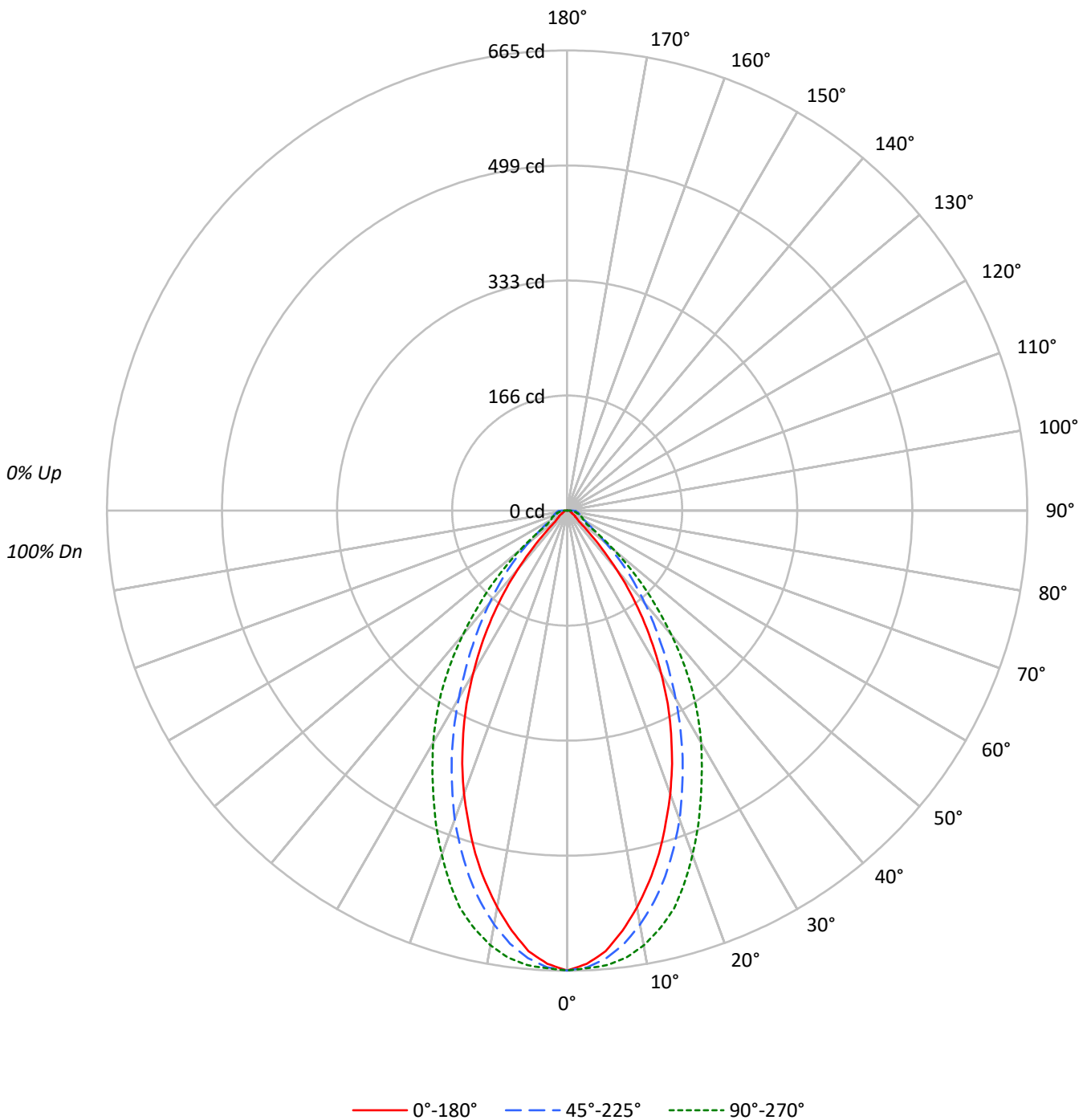
Lumens per Lamp: N/A
Luminaire Lumens: 716.3 lumens
Efficiency: N/A
Efficacy: 20.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (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	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

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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	7.08	8.30	7.44	8.61	8.93	8.16	9.38	8.52	9.69	10.00
	3H	8.41	9.49	8.79	9.82	10.19	10.18	11.26	10.56	11.59	11.96
	4H	8.98	9.99	9.39	10.34	10.73	11.14	12.15	11.54	12.50	12.88
	6H	9.55	10.48	9.97	10.85	11.25	12.08	13.01	12.50	13.39	13.78
	8H	9.88	10.75	10.31	11.15	11.55	12.53	13.41	12.97	13.81	14.21
	12H	10.18	11.02	10.61	11.40	11.84	12.96	13.80	13.39	14.18	14.61
4H	2H	8.04	9.05	8.45	9.40	9.79	8.83	9.84	9.24	10.20	10.58
	3H	10.07	10.90	10.48	11.30	11.71	11.11	11.94	11.52	12.35	12.75
	4H	11.14	11.89	11.58	12.31	12.76	12.26	13.01	12.70	13.43	13.87
	6H	12.02	12.67	12.48	13.11	13.58	13.43	14.08	13.90	14.53	15.00
	8H	12.43	13.03	12.90	13.48	13.95	13.99	14.60	14.46	15.05	15.52
	12H	12.81	13.34	13.30	13.83	14.30	14.54	15.07	15.02	15.55	16.03
8H	4H	11.92	12.52	12.39	12.97	13.44	12.81	13.42	13.28	13.87	14.34
	6H	13.26	13.75	13.76	14.25	14.73	14.27	14.76	14.77	15.26	15.74
	8H	13.97	14.42	14.50	14.94	15.43	15.03	15.48	15.55	15.99	16.49
	12H	14.67	15.06	15.18	15.55	16.13	15.82	16.21	16.33	16.71	17.28
12H	4H	12.07	12.61	12.56	13.09	13.57	12.92	13.45	13.41	13.94	14.41
	6H	13.58	14.03	14.10	14.54	15.04	14.49	14.94	15.02	15.46	15.95
	8H	14.48	14.87	15.00	15.37	15.94	15.40	15.79	15.92	16.29	16.86