

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: P1058186

Luminaire Tested: S122RDR-S865D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058186
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-S865D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

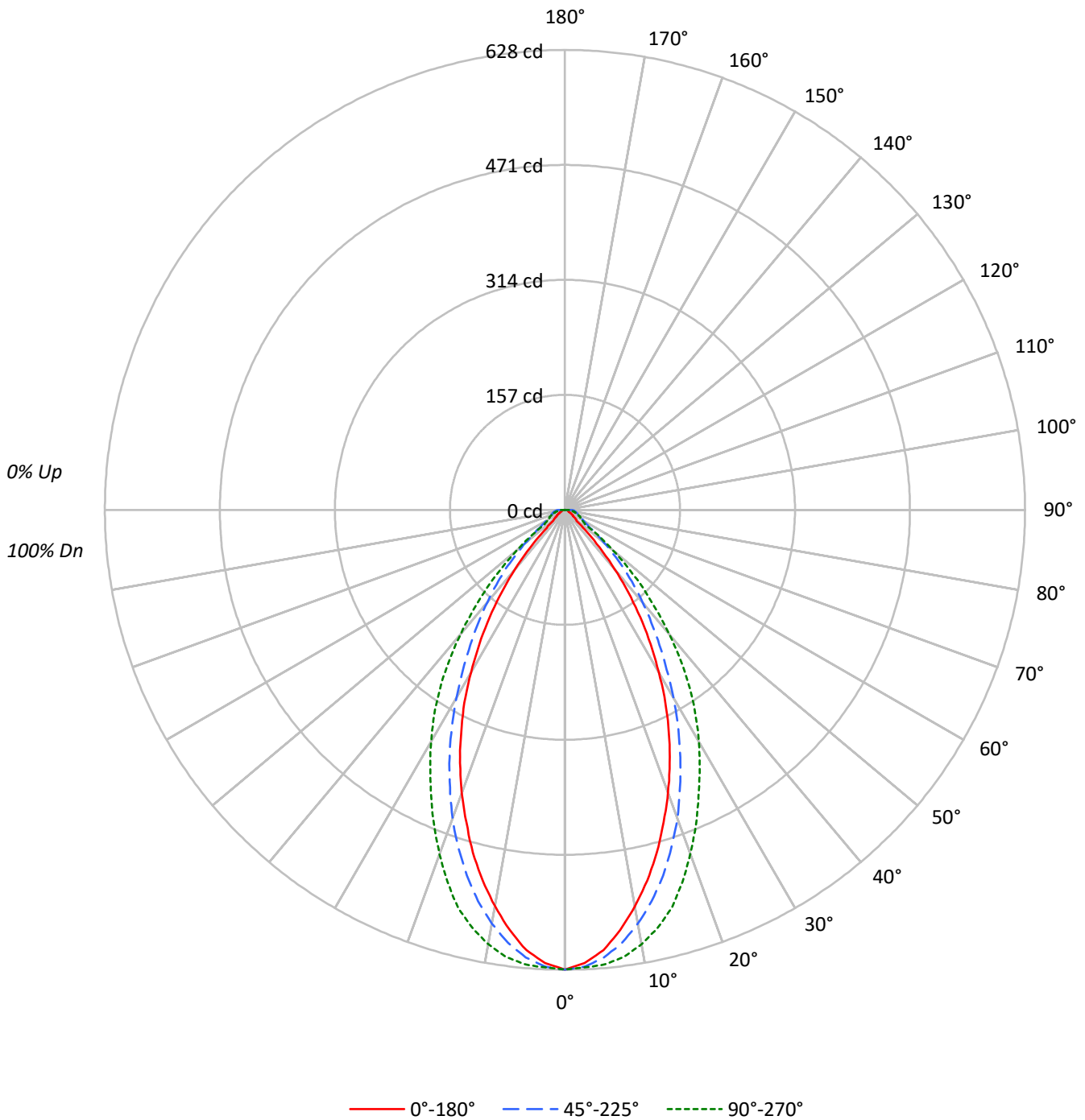
Lumens per Lamp: N/A
Luminaire Lumens: 676.7 lumens
Efficiency: N/A
Efficacy: 19.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11584	11584	11584
5°	11182	11362	11540
10°	10298	10749	11289
15°	9259	9878	10751
20°	8077	8809	9824
25°	6831	7590	8791
30°	5459	6305	7790
35°	4037	5066	6693
40°	2549	3970	5331
45°	1005	2983	3922
50°	517	2004	2417
55°	425	1316	1084
60°	310	1067	978
65°	262	1000	1000
70°	259	1036	971
75°	342	1198	1027
80°	510	1530	1148
85°	762	2541	1524

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 5076 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	8.5
10°-20°	145.0	21.4
20°-30°	172.4	25.5
30°-40°	143.4	21.2
40°-50°	80.1	11.8
50°-60°	32.4	4.8
60°-70°	20.7	3.1
70°-80°	15.5	2.3
80°-90°	9.9	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°	374.8	55.4
0°-40°	518.2	76.6
0°-60°	630.6	93.2
0°-90°	676.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	676.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	604	615	613	618	623	56
15°	485	499	517	544	563	135
25°	336	349	373	402	432	153
35°	179	196	225	262	297	111
45°	38	65	114	134	150	36
55°	13	28	41	40	34	11
65°	6	24	23	22	23	6
75°	5	17	17	16	14	5
85°	4	11	12	11	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	627.8	627.8	627.8	627.8	627.8
2.5°	619.4	629.0	624.2	624.2	625.4
5°	603.7	614.6	613.4	618.2	623.0
7.5°	578.5	590.5	596.5	607.3	615.8
10°	549.6	562.8	573.7	590.5	602.5
12.5°	518.3	531.6	547.2	568.9	584.5
15°	484.7	499.1	517.1	543.6	562.8
17.5°	447.4	463.0	483.5	512.3	532.8
20°	411.3	426.9	448.6	477.5	500.3
22.5°	374.0	387.3	410.1	439.0	466.6
25°	335.5	348.8	372.8	401.7	431.8
27.5°	297.1	310.3	334.3	364.4	398.1
30°	256.2	270.6	295.9	329.5	365.6
32.5°	217.7	232.1	258.6	295.9	331.9
35°	179.2	196.0	224.9	262.2	297.1
37.5°	141.9	161.2	193.6	228.5	259.8
40°	105.8	126.3	164.8	194.8	221.3
42.5°	69.8	93.8	138.3	163.6	184.0
45°	38.5	64.9	114.3	133.5	150.3
47.5°	21.6	42.1	90.2	105.8	115.5
50°	18.0	31.3	69.8	80.6	84.2
52.5°	14.4	28.9	52.9	58.9	56.5
55°	13.2	27.7	40.9	39.7	33.7
57.5°	10.8	27.7	32.5	28.9	28.9
60°	8.4	26.5	28.9	25.3	26.5
62.5°	7.2	25.3	26.5	24.1	24.1
65°	6.0	24.1	22.9	21.6	22.9
67.5°	4.8	21.6	21.6	20.4	20.4
70°	4.8	20.4	19.2	18.0	18.0
72.5°	4.8	18.0	18.0	16.8	16.8
75°	4.8	16.8	16.8	15.6	14.4
77.5°	4.8	14.4	15.6	14.4	13.2
80°	4.8	13.2	14.4	13.2	10.8
82.5°	4.8	12.0	13.2	12.0	9.6
85°	3.6	10.8	12.0	10.8	7.2
87.5°	3.6	10.8	12.0	9.6	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)