

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: P1058177

Luminaire Tested: S122RDR-S865D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058177
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-S865D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

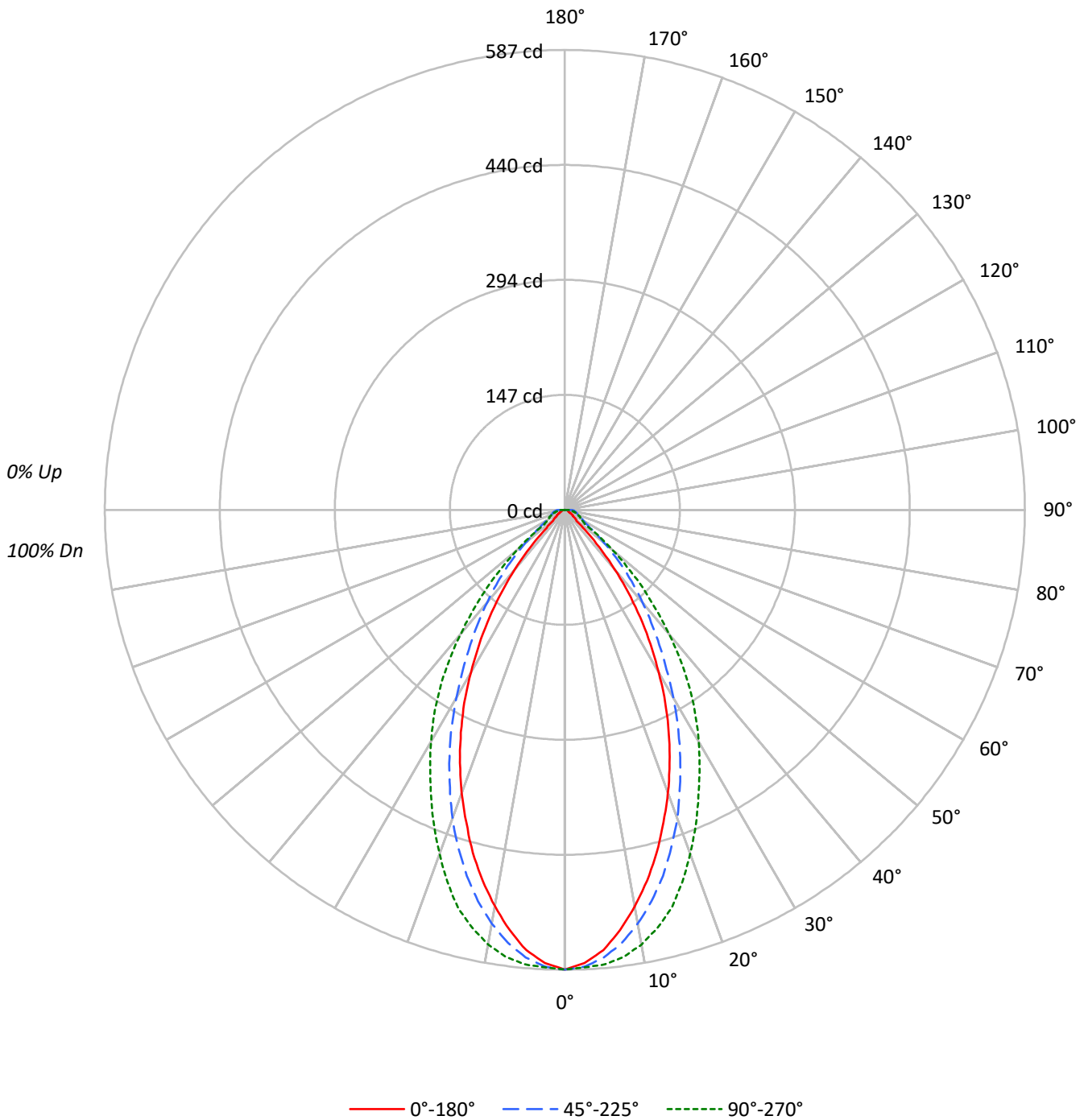
Lumens per Lamp: N/A
Luminaire Lumens: 632.5 lumens
Efficiency: N/A
Efficacy: 18.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	10828	10828	10828
5°	10453	10619	10786
10°	9625	10047	10553
15°	8654	9235	10050
20°	7550	8234	9182
25°	6385	7095	8217
30°	5101	5891	7281
35°	3773	4735	6256
40°	2382	3710	4981
45°	939	2787	3666
50°	485	1872	2259
55°	399	1229	1013
60°	292	996	912
65°	245	934	934
70°	243	971	912
75°	321	1119	962
80°	478	1435	1073
85°	720	2371	1419

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4738 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	8.5
10°-20°	135.6	21.4
20°-30°	161.1	25.5
30°-40°	134.0	21.2
40°-50°	74.8	11.8
50°-60°	30.2	4.8
60°-70°	19.3	3.1
70°-80°	14.5	2.3
80°-90°	9.2	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°	350.3	55.4
0°-40°	484.3	76.6
0°-60°	589.4	93.2
0°-90°	632.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	632.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	564	574	573	578	582	52
15°	453	466	483	508	526	126
25°	314	326	348	376	404	143
35°	168	183	210	245	278	104
45°	36	61	107	125	140	34
55°	12	26	38	37	32	11
65°	6	22	21	20	21	6
75°	4	16	16	15	14	5
85°	3	10	11	10	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	586.8	586.8	586.8	586.8	586.8
2.5°	578.9	587.9	583.4	583.4	584.5
5°	564.3	574.4	573.3	577.8	582.3
7.5°	540.7	551.9	557.6	567.7	575.6
10°	513.7	526.1	536.2	551.9	563.2
12.5°	484.5	496.9	511.5	531.7	546.3
15°	453.0	466.5	483.4	508.1	526.1
17.5°	418.2	432.8	451.9	478.9	498.0
20°	384.5	399.1	419.3	446.3	467.6
22.5°	349.6	362.0	383.3	410.3	436.2
25°	313.6	326.0	348.5	375.5	403.6
27.5°	277.7	290.0	312.5	340.6	372.1
30°	239.4	252.9	276.5	308.0	341.7
32.5°	203.5	217.0	241.7	276.5	310.3
35°	167.5	183.2	210.2	245.1	277.7
37.5°	132.6	150.6	181.0	213.6	242.8
40°	98.9	118.0	154.0	182.1	206.8
42.5°	65.2	87.7	129.3	152.9	172.0
45°	36.0	60.7	106.8	124.8	140.5
47.5°	20.2	39.3	84.3	98.9	107.9
50°	16.9	29.2	65.2	75.3	78.7
52.5°	13.5	27.0	49.5	55.1	52.8
55°	12.4	25.9	38.2	37.1	31.5
57.5°	10.1	25.9	30.4	27.0	27.0
60°	7.9	24.7	27.0	23.6	24.7
62.5°	6.7	23.6	24.7	22.5	22.5
65°	5.6	22.5	21.4	20.2	21.4
67.5°	4.5	20.2	20.2	19.1	19.1
70°	4.5	19.1	18.0	16.9	16.9
72.5°	4.5	16.9	16.9	15.7	15.7
75°	4.5	15.7	15.7	14.6	13.5
77.5°	4.5	13.5	14.6	13.5	12.4
80°	4.5	12.4	13.5	12.4	10.1
82.5°	4.5	11.2	12.4	11.2	9.0
85°	3.4	10.1	11.2	10.1	6.7
87.5°	3.4	10.1	11.2	9.0	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)