

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: P1058174

Luminaire Tested: S122RDR-S865D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058174
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

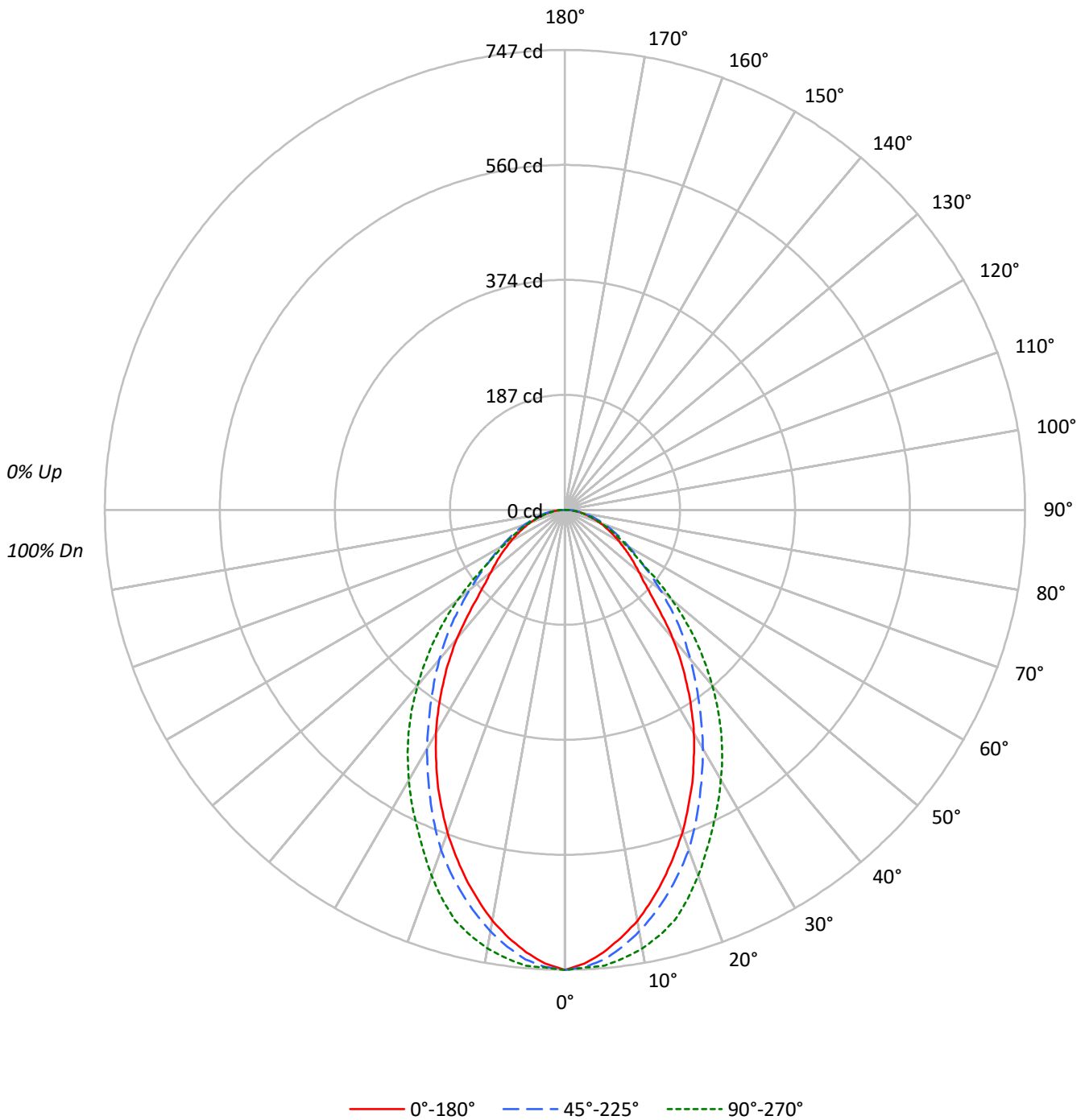
Lumens per Lamp: N/A
Luminaire Lumens: 1216.9 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13790	13790	13790
5°	13361	13581	13763
10°	12702	13028	13556
15°	11852	12329	13178
20°	10947	11544	12418
25°	9960	10534	11573
30°	8921	9546	10792
35°	7769	8526	9968
40°	6559	7629	8961
45°	5209	6738	7842
50°	4484	5790	6508
55°	4082	4954	4990
60°	3724	4403	4244
65°	3410	3978	3742
70°	3162	3685	3334
75°	2937	3479	2937
80°	2763	3347	2646
85°	2752	3451	2287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7842 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.0	5.7
10°-20°	182.4	15.0
20°-30°	240.0	19.7
30°-40°	241.3	19.8
40°-50°	195.6	16.1
50°-60°	134.7	11.1
60°-70°	88.2	7.2
70°-80°	49.1	4.0
80°-90°	16.6	1.4
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°	491.4	40.4
0°-40°	732.7	60.2
0°-60°	1063.0	87.4
0°-90°	1216.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1216.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	721	735	733	736	743	67
15°	620	636	645	669	690	174
25°	489	502	517	540	568	224
35°	345	361	378	412	442	215
45°	200	222	258	281	300	158
55°	127	141	154	157	155	114
65°	78	93	91	87	86	78
75°	41	51	49	43	41	44
85°	13	17	16	14	11	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	747.3	747.3	747.3	747.3	747.3
2.5°	737.6	750.6	743.0	743.0	744.1
5°	721.3	735.4	733.2	736.5	743.0
7.5°	700.7	715.9	715.9	725.6	734.3
10°	677.9	693.1	695.3	710.5	723.5
12.5°	649.7	664.9	671.4	690.9	708.3
15°	620.4	635.6	645.4	669.2	689.8
17.5°	589.0	604.2	617.2	642.1	662.7
20°	557.5	571.6	587.9	609.6	632.4
22.5°	522.8	538.0	553.2	573.8	599.8
25°	489.2	502.2	517.4	540.2	568.4
27.5°	453.4	467.5	481.6	508.7	538.0
30°	418.7	432.8	448.0	476.2	506.5
32.5°	381.8	397.0	412.2	443.6	475.1
35°	344.9	361.2	378.5	412.2	442.5
37.5°	309.1	326.5	347.1	381.8	407.8
40°	272.3	290.7	316.7	347.1	372.0
42.5°	233.2	256.0	287.4	313.5	336.2
45°	199.6	222.4	258.2	280.9	300.5
47.5°	174.6	193.1	227.8	247.3	263.6
50°	156.2	170.3	201.7	215.8	226.7
52.5°	141.0	155.1	176.8	186.6	189.8
55°	126.9	141.0	154.0	157.3	155.1
57.5°	112.8	128.0	135.6	132.3	132.3
60°	100.9	117.1	119.3	115.0	115.0
62.5°	88.9	105.2	105.2	99.8	99.8
65°	78.1	93.3	91.1	86.8	85.7
67.5°	68.3	82.4	79.2	74.8	73.8
70°	58.6	71.6	68.3	62.9	61.8
72.5°	49.9	61.8	57.5	53.1	51.0
75°	41.2	51.0	48.8	43.4	41.2
77.5°	33.6	41.2	39.0	34.7	32.5
80°	26.0	32.5	31.5	27.1	24.9
82.5°	19.5	24.9	23.9	20.6	17.4
85°	13.0	17.4	16.3	14.1	10.8
87.5°	6.5	11.9	10.8	9.8	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)