

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: P1060562

Luminaire Tested: S124RDR-S795D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060562
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D840-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 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

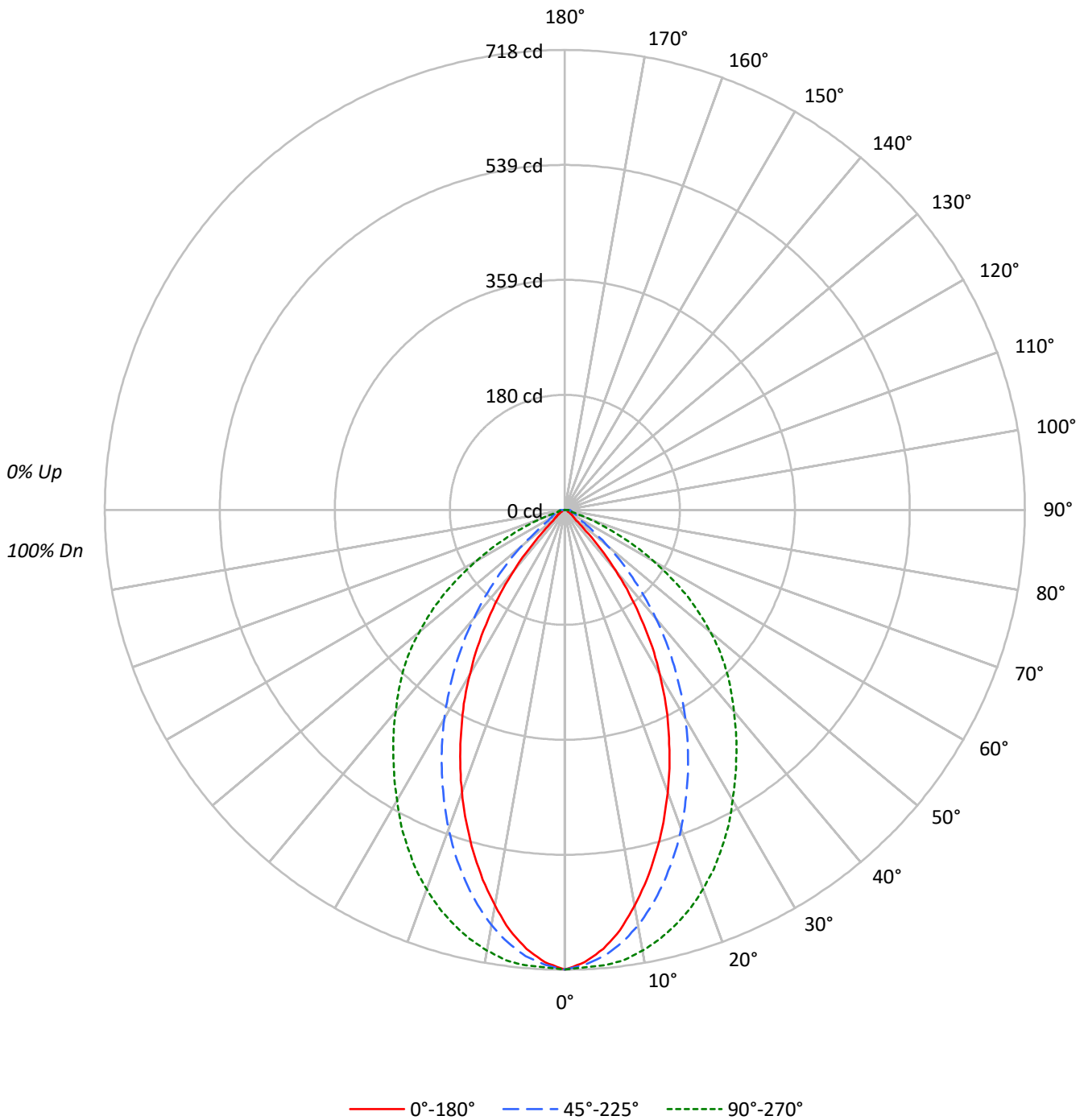
Lumens per Lamp: N/A
Luminaire Lumens: 900.7 lumens
Efficiency: N/A
Efficacy: 34.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6179	6179	6179
5°	5948	6046	6170
10°	5485	5760	6109
15°	4923	5346	5974
20°	4302	4860	5775
25°	3639	4316	5517
30°	2939	3743	5207
35°	2189	3127	4906
40°	1389	2479	4616
45°	555	1817	4352
50°	242	1159	3972
55°	186	599	3468
60°	131	410	2750
65°	98	408	1879
70°	96	360	861
75°	126	379	349
80°	188	426	377
85°	375	751	563

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4352 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.7	7.3
10°-20°	169.4	18.8
20°-30°	214.0	23.8
30°-40°	196.6	21.8
40°-50°	134.0	14.9
50°-60°	72.7	8.1
60°-70°	30.8	3.4
70°-80°	10.7	1.2
80°-90°	6.8	0.8
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°	449.1	49.9
0°-40°	645.7	71.7
0°-60°	852.4	94.6
0°-90°	900.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	900.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	688	699	700	705	714	64
15°	552	570	600	642	670	154
25°	383	408	454	525	581	175
35°	208	236	298	391	467	129
45°	46	73	149	264	357	42
55°	12	13	40	145	231	11
65°	5	6	20	46	92	5
75°	4	10	11	10	10	4
85°	4	8	8	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	717.6	717.6	717.6	717.6	717.6
2.5°	707.2	715.7	711.0	712.9	714.8
5°	688.1	698.6	699.5	705.2	713.8
7.5°	661.5	673.9	681.5	695.7	709.1
10°	627.3	642.5	658.7	681.5	698.6
12.5°	591.2	607.4	631.1	663.4	686.2
15°	552.2	570.3	599.7	642.5	670.1
17.5°	511.4	531.3	566.5	616.9	652.0
20°	469.5	491.4	530.4	587.4	630.2
22.5°	426.8	449.6	492.3	557.0	607.4
25°	383.0	407.8	454.3	524.7	580.7
27.5°	341.2	364.0	415.4	492.3	554.1
30°	295.6	321.3	376.4	459.1	523.7
32.5°	253.8	278.5	336.5	424.9	495.2
35°	208.2	235.7	297.5	390.6	466.7
37.5°	165.4	192.0	259.5	358.3	439.1
40°	123.6	151.1	220.5	326.0	410.6
42.5°	82.7	112.2	183.4	292.7	384.0
45°	45.6	73.2	149.2	264.2	357.4
47.5°	23.8	39.9	116.9	235.7	328.9
50°	18.1	21.9	86.5	204.4	296.5
52.5°	15.2	16.2	58.9	173.0	264.2
55°	12.4	13.3	39.9	145.4	231.0
57.5°	9.5	10.5	28.5	118.8	193.9
60°	7.6	8.6	23.8	91.2	159.7
62.5°	5.7	6.7	22.8	67.5	125.5
65°	4.8	5.7	20.0	45.6	92.2
67.5°	3.8	5.7	17.1	29.5	61.8
70°	3.8	7.6	14.3	19.0	34.2
72.5°	3.8	8.6	12.4	12.4	12.4
75°	3.8	10.5	11.4	10.5	10.5
77.5°	3.8	9.5	9.5	9.5	9.5
80°	3.8	8.6	8.6	8.6	7.6
82.5°	3.8	7.6	8.6	8.6	6.7
85°	3.8	7.6	7.6	7.6	5.7
87.5°	2.9	7.6	7.6	7.6	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)