

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: P1060544

Luminaire Tested: S124RDR-S795D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060544
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-S795D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

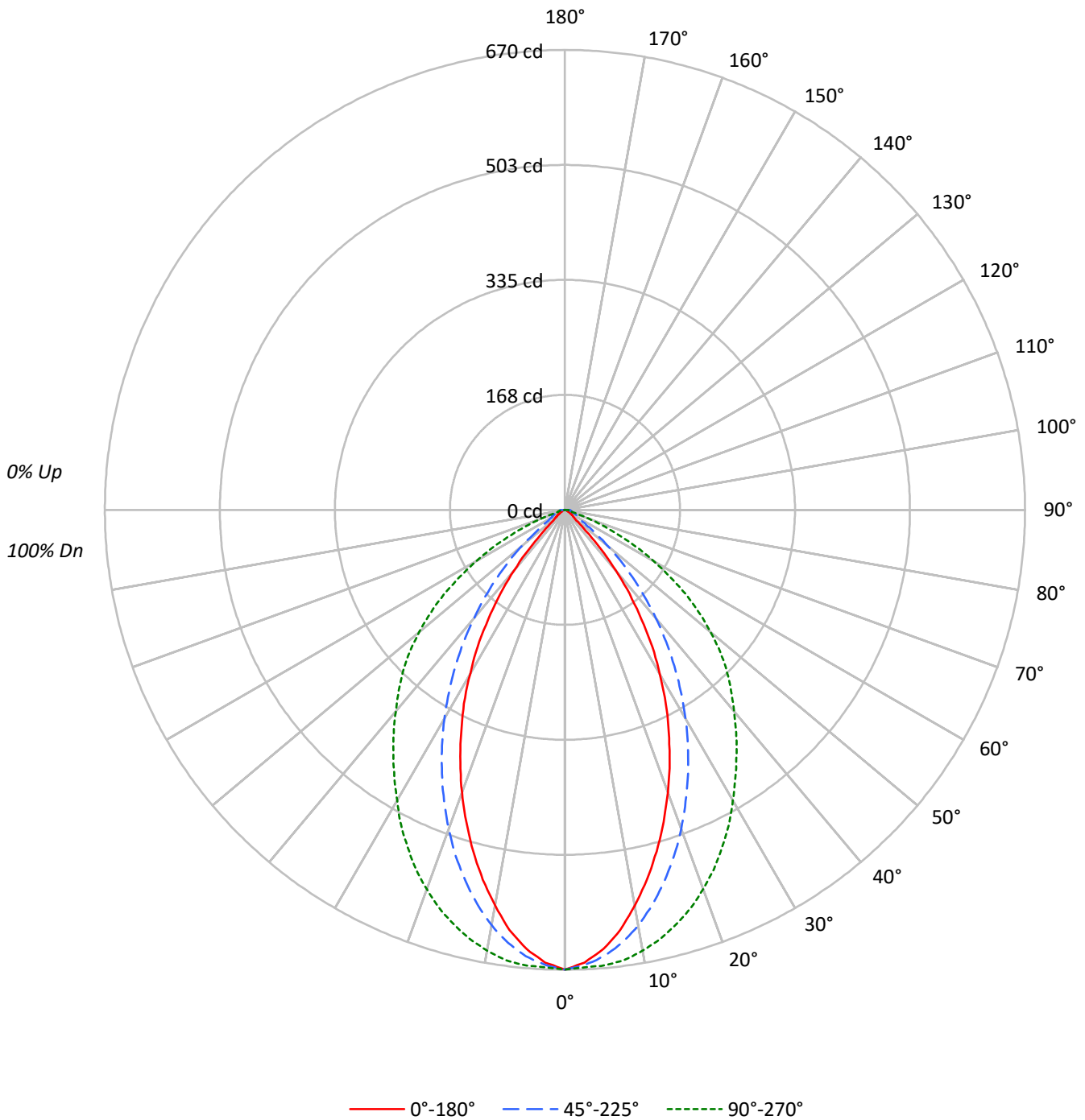
Lumens per Lamp: N/A
Luminaire Lumens: 840.6 lumens
Efficiency: N/A
Efficacy: 32.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	103	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°	5768	5768	5768
5°	5552	5644	5759
10°	5120	5376	5701
15°	4595	4991	5575
20°	4016	4536	5390
25°	3397	4029	5150
30°	2743	3493	4860
35°	2043	2919	4579
40°	1296	2313	4308
45°	519	1696	4063
50°	226	1081	3708
55°	173	560	3237
60°	122	382	2566
65°	90	379	1752
70°	88	335	803
75°	116	353	326
80°	174	397	352
85°	346	701	524

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4063 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	7.3
10°-20°	158.1	18.8
20°-30°	199.7	23.8
30°-40°	183.5	21.8
40°-50°	125.1	14.9
50°-60°	67.8	8.1
60°-70°	28.8	3.4
70°-80°	10.0	1.2
80°-90°	6.3	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°	419.2	49.9
0°-40°	602.6	71.7
0°-60°	795.6	94.6
0°-90°	840.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	670	670	670	670	670	
5°	642	652	653	658	666	60
15°	515	532	560	600	625	144
25°	358	381	424	490	542	163
35°	194	220	278	365	436	121
45°	43	68	139	247	334	39
55°	12	12	37	136	216	10
65°	4	5	19	43	86	5
75°	4	10	11	10	10	4
85°	4	7	7	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	669.8	669.8	669.8	669.8	669.8
2.5°	660.0	668.0	663.6	665.3	667.1
5°	642.3	652.0	652.9	658.2	666.2
7.5°	617.4	629.0	636.1	649.4	661.8
10°	585.5	599.7	614.8	636.1	652.0
12.5°	551.8	566.9	589.0	619.2	640.5
15°	515.4	532.3	559.8	599.7	625.4
17.5°	477.3	495.9	528.7	575.7	608.6
20°	438.2	458.6	495.0	548.2	588.2
22.5°	398.3	419.6	459.5	519.8	566.9
25°	357.5	380.6	424.0	489.7	542.0
27.5°	318.5	339.8	387.7	459.5	517.2
30°	275.9	299.8	351.3	428.5	488.8
32.5°	236.9	259.9	314.0	396.5	462.2
35°	194.3	220.0	277.7	364.6	435.6
37.5°	154.4	179.2	242.2	334.4	409.8
40°	115.3	141.1	205.8	304.3	383.2
42.5°	77.2	104.7	171.2	273.2	358.4
45°	42.6	68.3	139.3	246.6	333.6
47.5°	22.2	37.3	109.1	220.0	306.9
50°	16.9	20.4	80.7	190.7	276.8
52.5°	14.2	15.1	55.0	161.5	246.6
55°	11.5	12.4	37.3	135.7	215.6
57.5°	8.9	9.8	26.6	110.9	181.0
60°	7.1	8.0	22.2	85.2	149.0
62.5°	5.3	6.2	21.3	63.0	117.1
65°	4.4	5.3	18.6	42.6	86.0
67.5°	3.5	5.3	16.0	27.5	57.7
70°	3.5	7.1	13.3	17.7	31.9
72.5°	3.5	8.0	11.5	11.5	11.5
75°	3.5	9.8	10.6	9.8	9.8
77.5°	3.5	8.9	8.9	8.9	8.9
80°	3.5	8.0	8.0	8.0	7.1
82.5°	3.5	7.1	8.0	8.0	6.2
85°	3.5	7.1	7.1	7.1	5.3
87.5°	2.7	7.1	7.1	7.1	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)