

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: P1060518

Luminaire Tested: S124RDR-S575D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060518
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

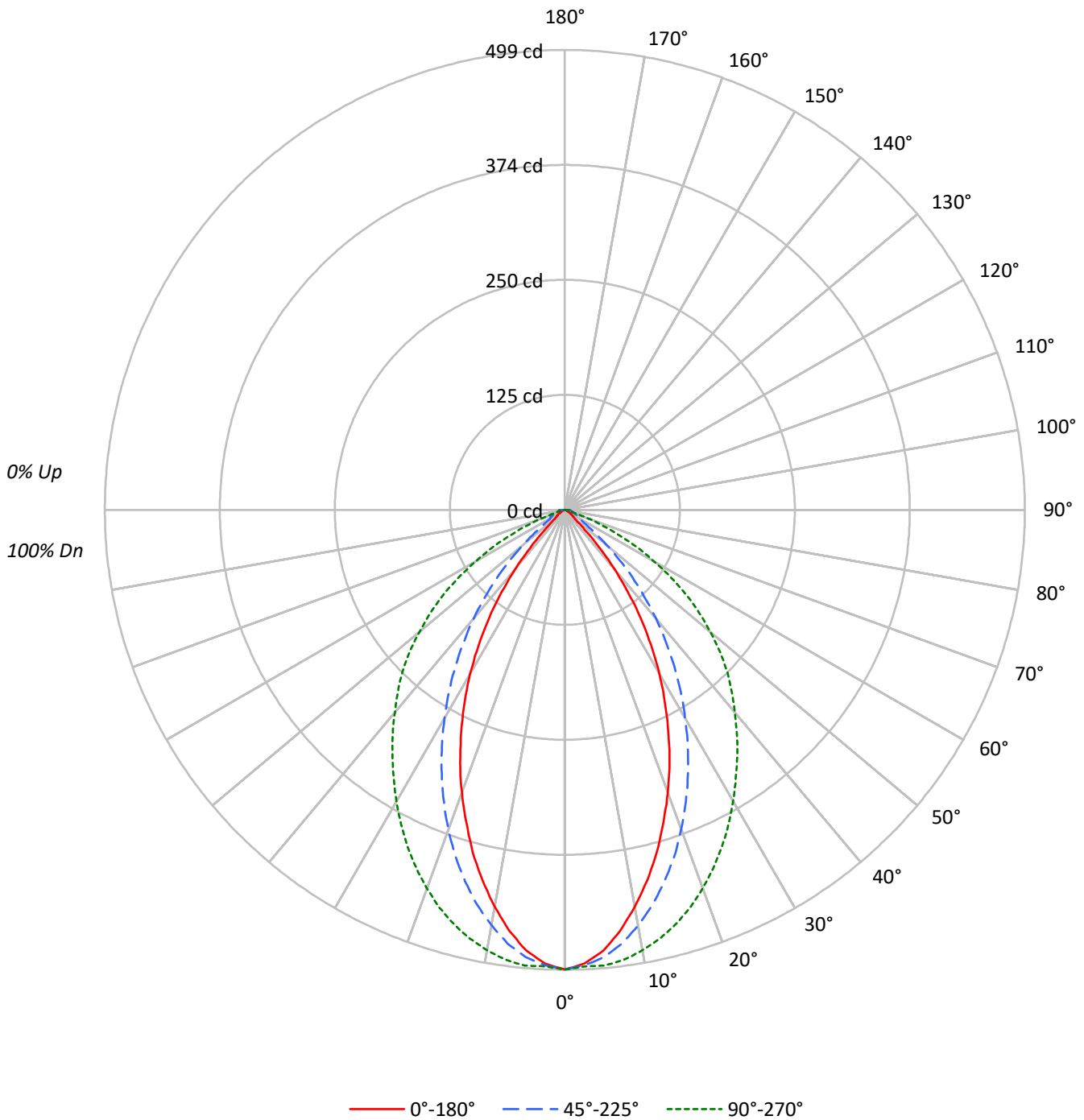
Lumens per Lamp: N/A
Luminaire Lumens: 628.5 lumens
Efficiency: N/A
Efficacy: 32.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4294	4294	4294
5°	4149	4210	4290
10°	3823	4002	4243
15°	3433	3720	4148
20°	2993	3384	4006
25°	2525	3003	3832
30°	2037	2596	3631
35°	1507	2172	3427
40°	934	1730	3224
45°	370	1262	3036
50°	165	792	2760
55°	132	413	2417
60°	91	312	1925
65°	59	310	1324
70°	58	279	619
75°	77	273	273
80°	114	317	317
85°	227	632	464

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3036 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.7	7.3
10°-20°	118.1	18.8
20°-30°	149.0	23.7
30°-40°	136.7	21.8
40°-50°	93.1	14.8
50°-60°	50.7	8.1
60°-70°	21.9	3.5
70°-80°	8.0	1.3
80°-90°	5.2	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°	312.8	49.8
0°-40°	449.6	71.5
0°-60°	593.4	94.4
0°-90°	628.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	628.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	499	499	499	499	499	
5°	480	486	487	492	496	44
15°	385	399	417	447	465	107
25°	266	284	316	366	403	121
35°	143	164	207	272	326	89
45°	30	51	104	184	249	28
55°	9	9	28	101	161	8
65°	3	4	15	32	65	3
75°	2	8	8	8	8	2
85°	2	5	6	6	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	498.7	498.7	498.7	498.7	498.7
2.5°	492.8	498.7	494.6	495.8	495.8
5°	480.0	486.4	487.0	492.3	496.3
7.5°	460.6	470.0	474.7	485.2	492.3
10°	437.2	448.4	457.7	475.9	485.2
12.5°	412.1	424.9	439.0	463.0	476.4
15°	385.1	398.6	417.3	447.2	465.3
17.5°	355.3	371.7	394.5	430.2	452.4
20°	326.6	343.0	369.3	409.7	437.2
22.5°	296.8	313.7	343.0	388.1	420.8
25°	265.7	284.5	316.1	366.4	403.3
27.5°	235.3	255.2	288.6	343.6	384.6
30°	204.9	224.8	261.1	320.2	365.2
32.5°	173.8	194.3	233.5	295.6	345.3
35°	143.4	164.5	206.6	272.2	326.0
37.5°	112.4	134.6	179.7	249.3	306.7
40°	83.1	105.4	153.9	226.5	286.8
42.5°	55.6	77.8	127.6	204.3	268.1
45°	30.4	50.9	103.6	183.8	249.3
47.5°	16.4	28.1	80.2	163.9	228.3
50°	12.3	15.2	59.1	142.8	206.0
52.5°	10.5	11.7	41.0	120.6	183.8
55°	8.8	9.4	27.5	101.3	161.0
57.5°	7.0	7.6	20.5	81.9	136.4
60°	5.3	6.4	18.1	63.2	111.8
62.5°	4.1	5.3	17.0	46.2	88.4
65°	2.9	4.1	15.2	31.6	65.0
67.5°	2.9	4.7	12.9	20.5	43.9
70°	2.3	6.4	11.1	13.5	24.6
72.5°	2.3	7.0	9.4	9.4	9.4
75°	2.3	7.6	8.2	8.2	8.2
77.5°	2.3	7.0	7.6	7.0	7.0
80°	2.3	6.4	6.4	6.4	6.4
82.5°	2.3	5.9	6.4	6.4	5.3
85°	2.3	5.3	6.4	6.4	4.7
87.5°	1.8	5.3	5.9	5.9	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)