

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: P1060279

Luminaire Tested: S124RDR-S1020D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060279
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1020D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

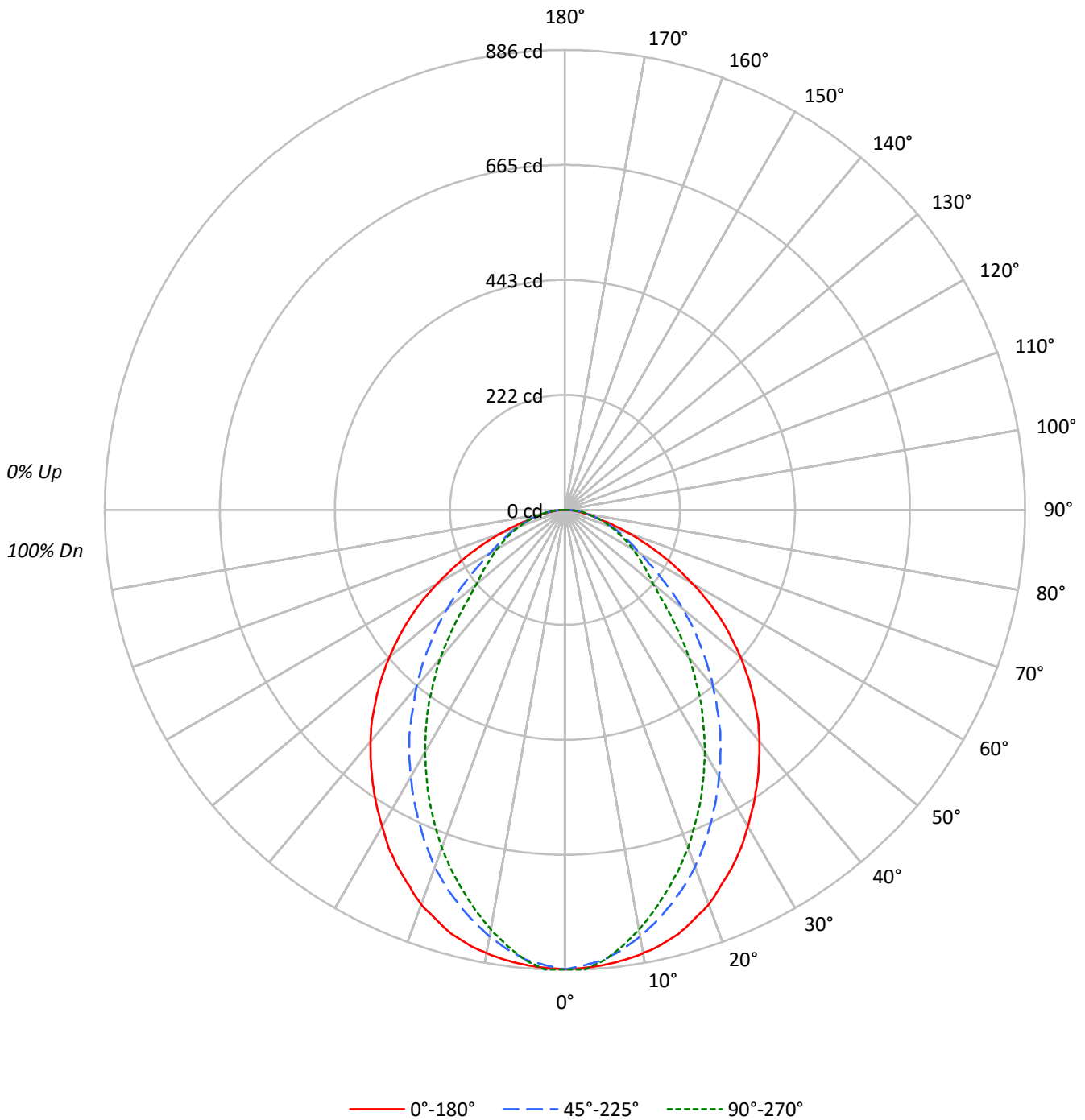
Lumens per Lamp: N/A
Luminaire Lumens: 1706.9 lumens
Efficiency: N/A
Efficacy: 48.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7623	7623	7623
5°	7607	7517	7526
10°	7585	7295	7176
15°	7539	7020	6770
20°	7416	6711	6349
25°	7225	6316	5871
30°	7002	5906	5357
35°	6779	5479	4811
40°	6548	4993	4197
45°	6258	4484	3508
50°	5909	3957	2969
55°	5498	3357	2749
60°	4872	2849	2597
65°	4155	2628	2459
70°	3248	2435	2331
75°	2216	2249	2249
80°	1909	2113	2167
85°	1640	2055	2263

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6258 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	4.8
10°-20°	223.7	13.1
20°-30°	310.5	18.2
30°-40°	332.9	19.5
40°-50°	294.9	17.3
50°-60°	222.2	13.0
60°-70°	143.9	8.4
70°-80°	73.8	4.3
80°-90°	22.7	1.3
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°	616.5	36.1
0°-40°	949.4	55.6
0°-60°	1466.5	85.9
0°-90°	1706.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1706.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	880	881	870	871	871	84
15°	846	827	787	768	759	238
25°	760	720	665	629	618	350
35°	645	587	521	474	458	403
45°	514	447	368	311	288	396
55°	366	305	224	188	183	325
65°	204	164	129	122	121	202
75°	67	70	68	68	68	79
85°	17	18	21	23	23	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	885.2	885.2	885.2	885.2	885.2
2.5°	883.1	886.3	877.9	884.2	886.3
5°	880.0	881.1	869.6	870.7	870.7
7.5°	874.8	872.7	854.0	848.8	847.8
10°	867.5	861.3	834.3	823.9	820.7
12.5°	858.2	846.7	812.4	797.9	791.6
15°	845.7	827.0	787.4	767.7	759.4
17.5°	827.0	803.1	761.4	736.5	727.1
20°	809.3	777.0	732.3	701.1	692.8
22.5°	784.3	750.0	699.0	665.7	655.3
25°	760.4	719.8	664.7	629.3	617.9
27.5°	734.4	688.6	629.3	591.9	577.3
30°	704.2	655.3	594.0	554.4	538.8
32.5°	675.1	623.1	557.6	513.9	497.2
35°	644.9	586.7	521.2	474.3	457.7
37.5°	613.7	552.4	480.6	434.8	413.0
40°	582.5	518.0	444.2	392.2	373.4
42.5°	550.3	482.7	406.7	352.6	328.7
45°	513.9	447.3	368.2	311.0	288.1
47.5°	478.5	413.0	332.9	270.5	249.7
50°	441.1	376.6	295.4	235.1	221.6
52.5°	403.6	339.1	259.0	208.0	201.8
55°	366.2	304.8	223.6	188.3	183.1
57.5°	324.5	269.4	192.4	170.6	166.4
60°	282.9	230.9	165.4	154.0	150.8
62.5°	242.4	197.6	146.7	137.3	135.2
65°	203.9	164.4	129.0	121.7	120.7
67.5°	166.4	135.2	112.3	108.2	106.1
70°	129.0	108.2	96.7	94.7	92.6
72.5°	95.7	87.4	82.2	81.1	80.1
75°	66.6	69.7	67.6	67.6	67.6
77.5°	53.1	54.1	55.1	56.2	55.1
80°	38.5	41.6	42.6	44.7	43.7
82.5°	27.0	29.1	32.2	33.3	34.3
85°	16.6	17.7	20.8	22.9	22.9
87.5°	7.3	8.3	10.4	12.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)