

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: P1060321

Luminaire Tested: S124RDR-S1195D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060321
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

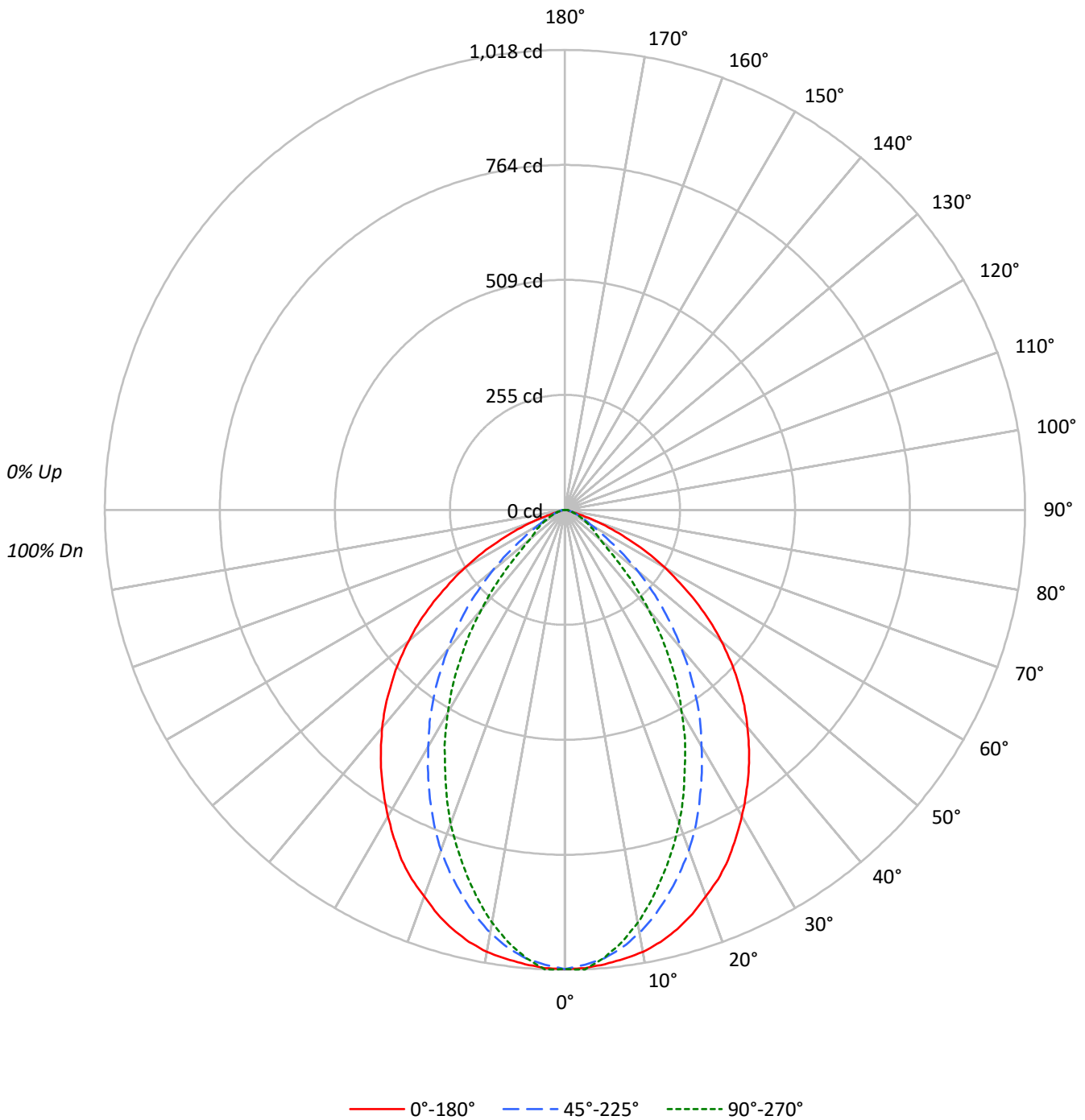
Lumens per Lamp: N/A
Luminaire Lumens: 1498.9 lumens
Efficiency: N/A
Efficacy: 35.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8754	8754	8754
5°	8726	8615	8603
10°	8689	8314	8114
15°	8565	7863	7467
20°	8345	7348	6770
25°	8122	6707	5959
30°	7788	6009	5140
35°	7451	5314	4245
40°	7066	4523	3219
45°	6609	3697	2163
50°	6042	2801	1342
55°	5310	1848	1139
60°	4390	1135	937
65°	3181	876	758
70°	1730	650	577
75°	383	476	526
80°	283	357	426
85°	287	287	425

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6609 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.2	6.3
10°-20°	250.2	16.7
20°-30°	331.4	22.1
30°-40°	328.9	21.9
40°-50°	253.1	16.9
50°-60°	150.9	10.1
60°-70°	68.6	4.6
70°-80°	17.8	1.2
80°-90°	4.0	0.3
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°	675.7	45.1
0°-40°	1004.7	67.0
0°-60°	1408.6	94.0
0°-90°	1498.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1498.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1017	1017	1017	1017	1017	
5°	1010	1011	997	997	995	96
15°	961	936	882	852	838	270
25°	855	793	706	647	627	392
35°	709	620	506	428	404	442
45°	543	437	304	212	178	418
55°	354	252	123	77	76	315
65°	156	93	43	37	37	157
75°	12	14	14	16	16	24
85°	3	3	3	4	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1016.6	1016.6	1016.6	1016.6	1016.6
2.5°	1015.2	1016.6	1008.0	1015.2	1018.1
5°	1009.5	1010.9	996.6	996.6	995.2
7.5°	1002.3	999.4	976.5	967.9	965.1
10°	993.7	983.7	950.8	933.6	927.9
12.5°	979.4	963.7	919.3	894.9	884.9
15°	960.8	936.4	882.0	852.0	837.6
17.5°	937.9	907.8	843.4	804.7	789.0
20°	910.7	870.6	801.8	753.2	738.8
22.5°	884.9	834.8	756.0	700.2	684.4
25°	854.8	793.3	705.9	647.2	627.2
27.5°	819.0	753.2	655.8	595.7	575.6
30°	783.2	710.2	604.3	541.2	516.9
32.5°	746.0	665.8	557.0	485.4	462.5
35°	708.8	620.0	505.5	428.1	403.8
37.5°	668.7	574.2	453.9	373.7	346.5
40°	628.6	529.8	402.4	320.7	286.4
42.5°	587.1	484.0	352.2	266.3	232.0
45°	542.7	436.7	303.6	211.9	177.6
47.5°	498.3	392.3	254.9	158.9	127.4
50°	451.0	345.1	209.1	116.0	100.2
52.5°	403.8	299.3	163.2	90.2	85.9
55°	353.7	252.0	123.1	77.3	75.9
57.5°	302.1	209.1	88.8	67.3	64.4
60°	254.9	169.0	65.9	57.3	54.4
62.5°	206.2	127.4	54.4	47.3	44.4
65°	156.1	93.1	43.0	37.2	37.2
67.5°	113.1	63.0	34.4	30.1	28.6
70°	68.7	38.7	25.8	24.3	22.9
72.5°	34.4	22.9	20.0	18.6	18.6
75°	11.5	14.3	14.3	15.8	15.8
77.5°	8.6	10.0	10.0	11.5	11.5
80°	5.7	7.2	7.2	8.6	8.6
82.5°	4.3	4.3	5.7	5.7	7.2
85°	2.9	2.9	2.9	4.3	4.3
87.5°	1.4	1.4	1.4	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)