

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: P1060482

Luminaire Tested: S124RDR-S575D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060482
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-S575D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

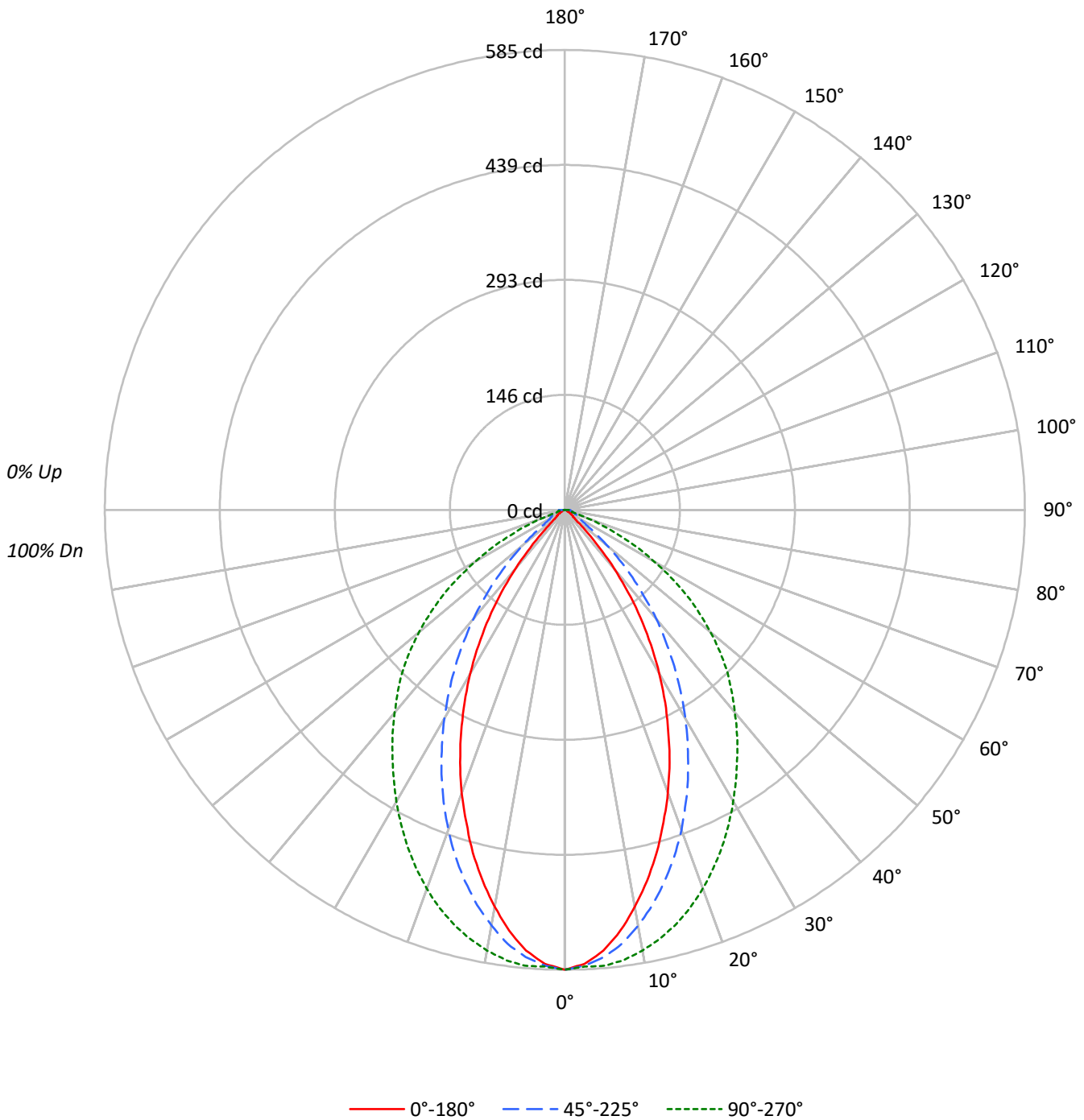
Lumens per Lamp: N/A
Luminaire Lumens: 737.2 lumens
Efficiency: N/A
Efficacy: 37.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90		90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81		81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72		72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65		65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59		59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54		54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49		49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45		45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42		42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5037	5037	5037
5°	4866	4937	5033
10°	4484	4695	4976
15°	4027	4364	4866
20°	3511	3970	4699
25°	2962	3522	4494
30°	2389	3045	4260
35°	1768	2547	4020
40°	1096	2030	3781
45°	435	1480	3562
50°	193	928	3238
55°	155	485	2834
60°	107	367	2258
65°	69	363	1553
70°	68	327	725
75°	90	319	319
80°	134	377	377
85°	267	751	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3562 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	7.3
10°-20°	138.5	18.8
20°-30°	174.8	23.7
30°-40°	160.4	21.8
40°-50°	109.2	14.8
50°-60°	59.5	8.1
60°-70°	25.7	3.5
70°-80°	9.4	1.3
80°-90°	6.1	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°	366.9	49.8
0°-40°	527.3	71.5
0°-60°	696.0	94.4
0°-90°	737.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	737.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	585	585	585	585	585	
5°	563	570	571	577	582	52
15°	452	468	490	524	546	126
25°	312	334	371	430	473	142
35°	168	193	242	319	382	104
45°	36	60	122	216	292	33
55°	10	11	32	119	189	9
65°	3	5	18	37	76	4
75°	3	9	10	10	10	3
85°	3	6	8	8	6	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	584.9	584.9	584.9	584.9	584.9
2.5°	578.0	584.9	580.1	581.5	581.5
5°	562.9	570.5	571.2	577.4	582.2
7.5°	540.3	551.3	556.8	569.1	577.4
10°	512.8	525.9	536.9	558.1	569.1
12.5°	483.3	498.4	514.9	543.0	558.8
15°	451.7	467.5	489.5	524.5	545.8
17.5°	416.7	435.9	462.7	504.6	530.7
20°	383.1	402.3	433.2	480.6	512.8
22.5°	348.1	368.0	402.3	455.2	493.6
25°	311.7	333.6	370.7	429.8	473.0
27.5°	276.0	299.3	338.5	403.0	451.0
30°	240.3	263.6	306.2	375.5	428.4
32.5°	203.9	227.9	273.9	346.7	405.0
35°	168.2	192.9	242.3	319.2	382.4
37.5°	131.8	157.9	210.8	292.5	359.7
40°	97.5	123.6	180.6	265.7	336.4
42.5°	65.2	91.3	149.7	239.6	314.4
45°	35.7	59.7	121.5	215.6	292.5
47.5°	19.2	33.0	94.1	192.2	267.7
50°	14.4	17.8	69.3	167.5	241.7
52.5°	12.4	13.7	48.1	141.4	215.6
55°	10.3	11.0	32.3	118.8	188.8
57.5°	8.2	8.9	24.0	96.1	160.0
60°	6.2	7.6	21.3	74.1	131.1
62.5°	4.8	6.2	19.9	54.2	103.7
65°	3.4	4.8	17.8	37.1	76.2
67.5°	3.4	5.5	15.1	24.0	51.5
70°	2.7	7.6	13.0	15.8	28.8
72.5°	2.7	8.2	11.0	11.0	11.0
75°	2.7	8.9	9.6	9.6	9.6
77.5°	2.7	8.2	8.9	8.2	8.2
80°	2.7	7.6	7.6	7.6	7.6
82.5°	2.7	6.9	7.6	7.6	6.2
85°	2.7	6.2	7.6	7.6	5.5
87.5°	2.1	6.2	6.9	6.9	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)