

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: P1060342

Luminaire Tested: S124RDR-S1195D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060342
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-S1195D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

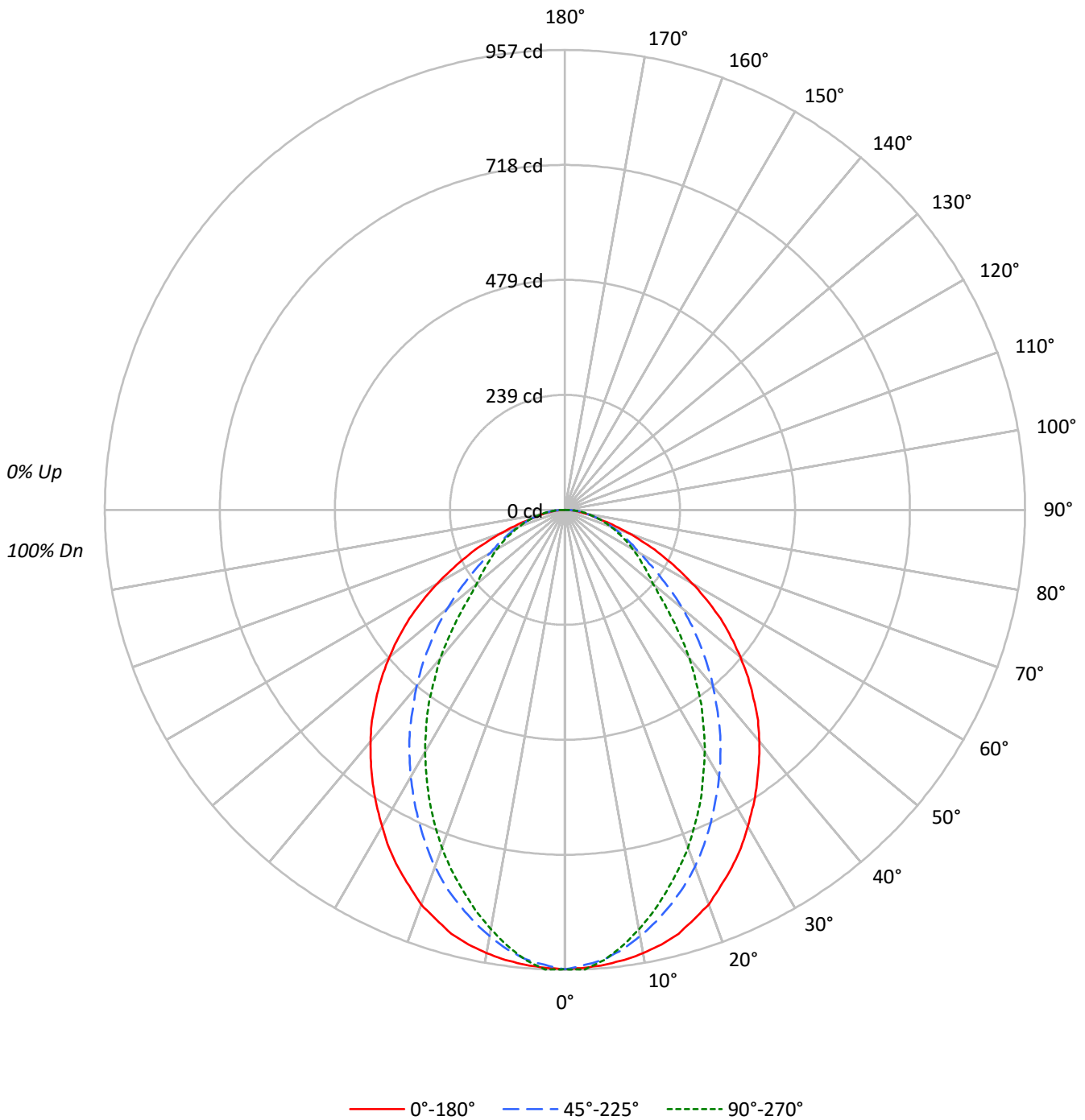
Lumens per Lamp: N/A
Luminaire Lumens: 1843.1 lumens
Efficiency: N/A
Efficacy: 44.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1060342

CATALOG NUMBER: S124RDR-S1195D927-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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°	8231	8231	8231
5°	8214	8117	8126
10°	8191	7877	7749
15°	8141	7580	7310
20°	8008	7247	6855
25°	7802	6819	6339
30°	7561	6378	5785
35°	7321	5915	5195
40°	7071	5391	4532
45°	6758	4842	3789
50°	6379	4273	3204
55°	5936	3626	2968
60°	5261	3076	2806
65°	4487	2838	2655
70°	3507	2631	2518
75°	2392	2429	2429
80°	2063	2286	2341
85°	1778	2223	2440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6758 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.9	4.8
10°-20°	241.5	13.1
20°-30°	335.3	18.2
30°-40°	359.4	19.5
40°-50°	318.4	17.3
50°-60°	239.9	13.0
60°-70°	155.4	8.4
70°-80°	79.7	4.3
80°-90°	24.5	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°	665.8	36.1
0°-40°	1025.2	55.6
0°-60°	1583.5	85.9
0°-90°	1843.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1843.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	956	956	956	956	956	
5°	950	951	939	940	940	90
15°	913	893	850	829	820	257
25°	821	777	718	680	667	378
35°	696	634	563	512	494	435
45°	555	483	398	336	311	428
55°	395	329	242	203	198	351
65°	220	178	139	131	130	218
75°	72	75	73	73	73	85
85°	18	19	22	25	25	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	955.9	955.9	955.9	955.9	955.9
2.5°	953.6	957.0	948.0	954.7	957.0
5°	950.3	951.4	939.0	940.1	940.1
7.5°	944.6	942.4	922.2	916.6	915.4
10°	936.8	930.0	900.8	889.6	886.2
12.5°	926.7	914.3	877.2	861.5	854.8
15°	913.2	893.0	850.3	828.9	820.0
17.5°	893.0	867.1	822.2	795.2	785.1
20°	873.9	839.1	790.8	757.1	748.1
22.5°	846.9	809.8	754.8	718.9	707.6
25°	821.1	777.3	717.7	679.6	667.2
27.5°	793.0	743.6	679.6	639.1	623.4
30°	760.4	707.6	641.4	598.7	581.8
32.5°	729.0	672.8	602.1	554.9	536.9
35°	696.4	633.5	562.7	512.2	494.2
37.5°	662.7	596.4	518.9	469.5	445.9
40°	629.0	559.4	479.6	423.5	403.2
42.5°	594.2	521.2	439.2	380.8	354.9
45°	554.9	483.0	397.6	335.8	311.1
47.5°	516.7	445.9	359.4	292.0	269.6
50°	476.2	406.6	319.0	253.9	239.2
52.5°	435.8	366.2	279.7	224.6	217.9
55°	395.4	329.1	241.5	203.3	197.7
57.5°	350.4	290.9	207.8	184.2	179.7
60°	305.5	249.4	178.6	166.2	162.9
62.5°	261.7	213.4	158.4	148.3	146.0
65°	220.2	177.5	139.3	131.4	130.3
67.5°	179.7	146.0	121.3	116.8	114.6
70°	139.3	116.8	104.5	102.2	100.0
72.5°	103.3	94.4	88.7	87.6	86.5
75°	71.9	75.3	73.0	73.0	73.0
77.5°	57.3	58.4	59.5	60.7	59.5
80°	41.6	44.9	46.1	48.3	47.2
82.5°	29.2	31.5	34.8	35.9	37.1
85°	18.0	19.1	22.5	24.7	24.7
87.5°	7.9	9.0	11.2	13.5	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)