

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: P1060257

Luminaire Tested: S124RDR-S1020D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060257
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-S1020D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

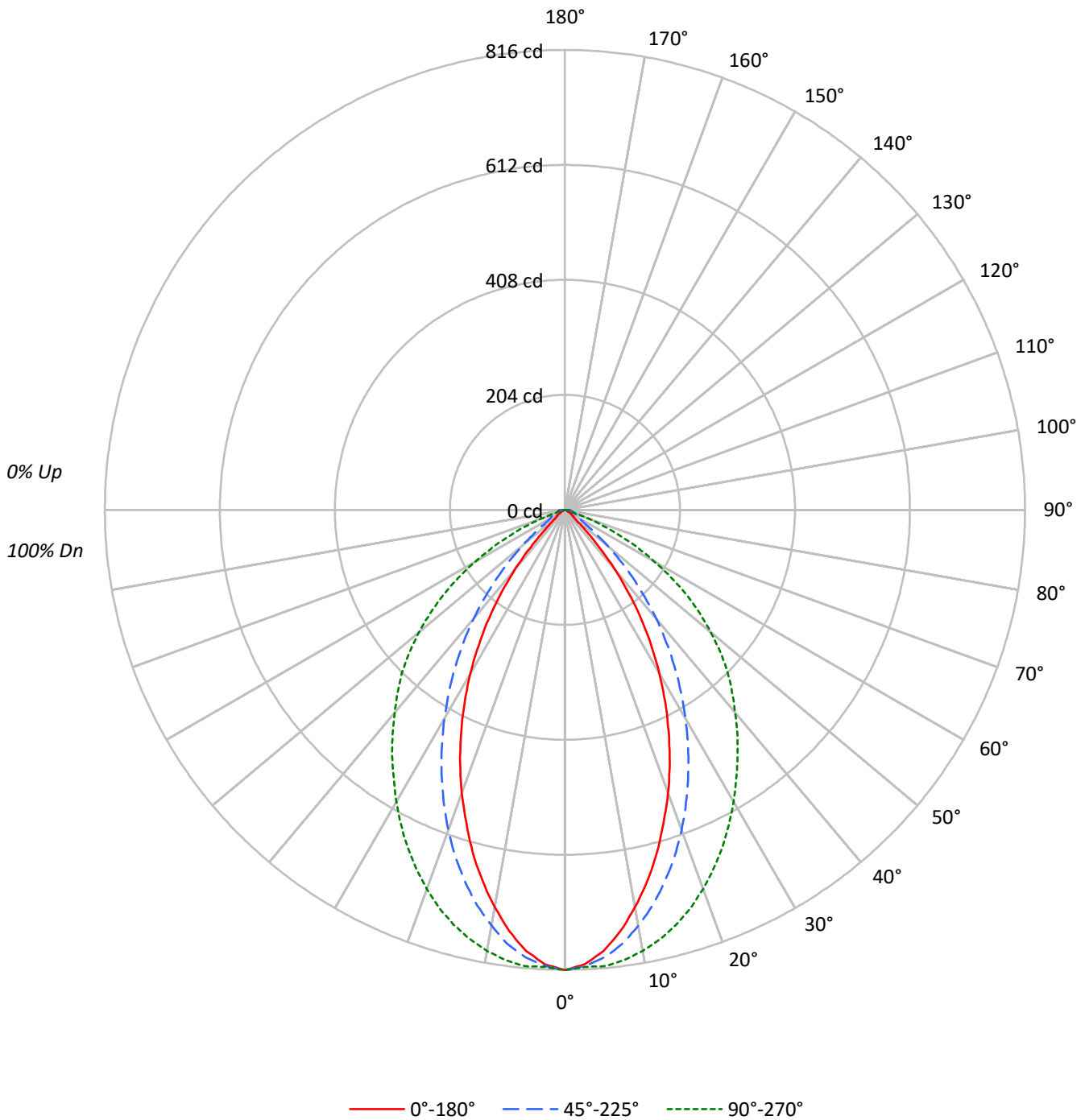
Lumens per Lamp: N/A
Luminaire Lumens: 1029.0 lumens
Efficiency: N/A
Efficacy: 29.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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°	7031	7031	7031
5°	6792	6892	7025
10°	6260	6553	6947
15°	5622	6092	6792
20°	4900	5541	6560
25°	4134	4917	6274
30°	3335	4250	5946
35°	2468	3556	5611
40°	1530	2833	5279
45°	606	2065	4971
50°	269	1297	4519
55°	216	676	3956
60°	148	512	3152
65°	98	507	2168
70°	96	458	1012
75°	126	446	446
80°	188	521	521
85°	375	1037	761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4971 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	7.3
10°-20°	193.3	18.8
20°-30°	244.0	23.7
30°-40°	223.9	21.8
40°-50°	152.5	14.8
50°-60°	83.0	8.1
60°-70°	35.9	3.5
70°-80°	13.1	1.3
80°-90°	8.4	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°	512.2	49.8
0°-40°	736.1	71.5
0°-60°	971.6	94.4
0°-90°	1029.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1029.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	816	816	816	816	816	
5°	786	796	797	806	813	73
15°	631	653	683	732	762	175
25°	435	466	518	600	660	199
35°	235	269	338	446	534	145
45°	50	83	170	301	408	46
55°	14	15	45	166	264	13
65°	5	7	25	52	106	6
75°	4	12	13	13	13	4
85°	4	9	10	10	8	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	816.5	816.5	816.5	816.5	816.5
2.5°	806.9	816.5	809.8	811.7	811.7
5°	785.8	796.4	797.3	806.0	812.7
7.5°	754.2	769.5	777.2	794.5	806.0
10°	715.9	734.1	749.4	779.1	794.5
12.5°	674.7	695.7	718.7	758.0	780.1
15°	630.6	652.6	683.3	732.2	761.9
17.5°	581.7	608.5	645.9	704.4	740.8
20°	534.7	561.6	604.7	670.8	715.9
22.5°	485.9	513.7	561.6	635.4	689.0
25°	435.1	465.7	517.5	599.9	660.3
27.5°	385.2	417.8	472.5	562.5	629.6
30°	335.4	368.0	427.4	524.2	598.0
32.5°	284.6	318.2	382.4	484.0	565.4
35°	234.8	269.3	338.3	445.6	533.8
37.5°	184.0	220.4	294.2	408.2	502.2
40°	136.1	172.5	252.0	370.9	469.6
42.5°	91.0	127.5	208.9	334.5	438.9
45°	49.8	83.4	169.6	300.9	408.2
47.5°	26.8	46.0	131.3	268.3	373.7
50°	20.1	24.9	96.8	233.8	337.3
52.5°	17.2	19.2	67.1	197.4	300.9
55°	14.4	15.3	45.0	165.8	263.5
57.5°	11.5	12.5	33.5	134.2	223.3
60°	8.6	10.5	29.7	103.5	183.0
62.5°	6.7	8.6	27.8	75.7	144.7
65°	4.8	6.7	24.9	51.7	106.4
67.5°	4.8	7.7	21.1	33.5	71.9
70°	3.8	10.5	18.2	22.0	40.2
72.5°	3.8	11.5	15.3	15.3	15.3
75°	3.8	12.5	13.4	13.4	13.4
77.5°	3.8	11.5	12.5	11.5	11.5
80°	3.8	10.5	10.5	10.5	10.5
82.5°	3.8	9.6	10.5	10.5	8.6
85°	3.8	8.6	10.5	10.5	7.7
87.5°	2.9	8.6	9.6	9.6	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)