

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: P1060507

Luminaire Tested: S124RDR-S575D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060507
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

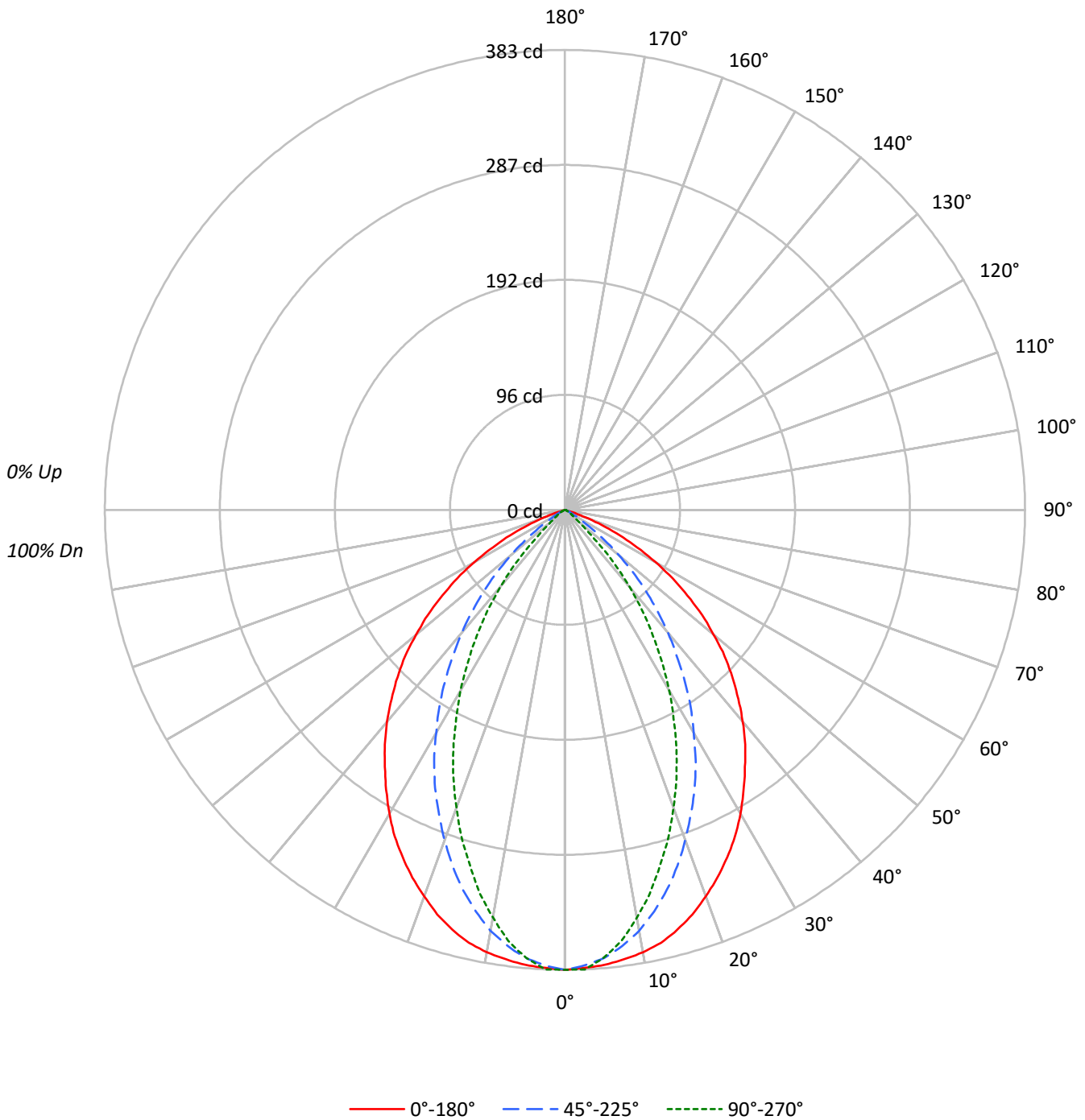
Lumens per Lamp: N/A
Luminaire Lumens: 500.2 lumens
Efficiency: N/A
Efficacy: 25.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060507

CATALOG NUMBER: S124RDR-S575D930-X4F0-XX-UDD-BVL-B

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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3298	3298	3298
5°	3287	3239	3235
10°	3272	3112	3015
15°	3227	2921	2729
20°	3140	2683	2419
25°	3035	2429	2088
30°	2906	2130	1728
35°	2747	1827	1345
40°	2589	1500	940
45°	2400	1153	465
50°	2165	778	155
55°	1869	399	108
60°	1497	143	76
65°	1027	79	35
70°	461	43	28
75°	0	20	20
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2400 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	7.1
10°-20°	92.7	18.5
20°-30°	120.0	24.0
30°-40°	114.0	22.8
40°-50°	80.8	16.1
50°-60°	41.5	8.3
60°-70°	14.5	2.9
70°-80°	1.3	0.3
80°-90°	0.0	0.0
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°	248.1	49.6
0°-40°	362.2	72.4
0°-60°	484.4	96.8
0°-90°	500.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	500.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	383	383	383	383	383	
5°	380	381	375	375	374	36
15°	362	351	328	312	306	102
25°	319	294	256	229	220	147
35°	261	223	174	140	128	163
45°	197	152	95	54	38	152
55°	124	82	27	8	7	111
65°	50	24	4	2	2	50
75°	0	1	1	1	1	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	383.0	383.0	383.0	383.0	383.0
2.5°	381.9	383.0	379.7	382.5	383.0
5°	380.3	380.8	374.7	374.7	374.2
7.5°	377.5	376.4	366.4	362.6	362.0
10°	374.2	370.3	355.9	347.6	344.8
12.5°	369.2	362.0	342.6	330.5	327.1
15°	362.0	350.9	327.7	312.2	306.1
17.5°	353.2	338.8	311.1	292.3	286.2
20°	342.6	324.4	292.8	271.8	264.0
22.5°	331.6	310.5	274.0	250.2	242.4
25°	319.4	294.5	255.7	228.6	219.8
27.5°	306.7	277.3	235.8	207.6	195.9
30°	292.3	260.2	214.2	184.9	173.8
32.5°	276.8	241.3	194.8	163.3	150.0
35°	261.3	223.1	173.8	140.0	127.9
37.5°	246.3	205.9	152.8	117.3	105.7
40°	230.3	187.1	133.4	96.9	83.6
42.5°	213.7	168.8	113.5	75.8	61.4
45°	197.1	151.7	94.7	54.2	38.2
47.5°	180.5	133.4	76.4	34.3	20.5
50°	161.6	115.7	58.1	18.3	11.6
52.5°	143.9	99.1	41.5	10.5	8.9
55°	124.5	81.9	26.6	7.7	7.2
57.5°	106.3	65.3	14.9	6.1	5.5
60°	86.9	50.4	8.3	5.0	4.4
62.5°	67.5	36.5	5.5	3.3	2.8
65°	50.4	24.4	3.9	2.2	1.7
67.5°	33.2	13.8	2.8	1.1	1.1
70°	18.3	6.6	1.7	1.1	1.1
72.5°	6.6	2.2	1.1	0.6	0.6
75°	0.0	0.6	0.6	0.6	0.6
77.5°	0.0	0.0	0.0	0.0	0.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)