

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: P1060533

Luminaire Tested: S124RDR-S575D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060533
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

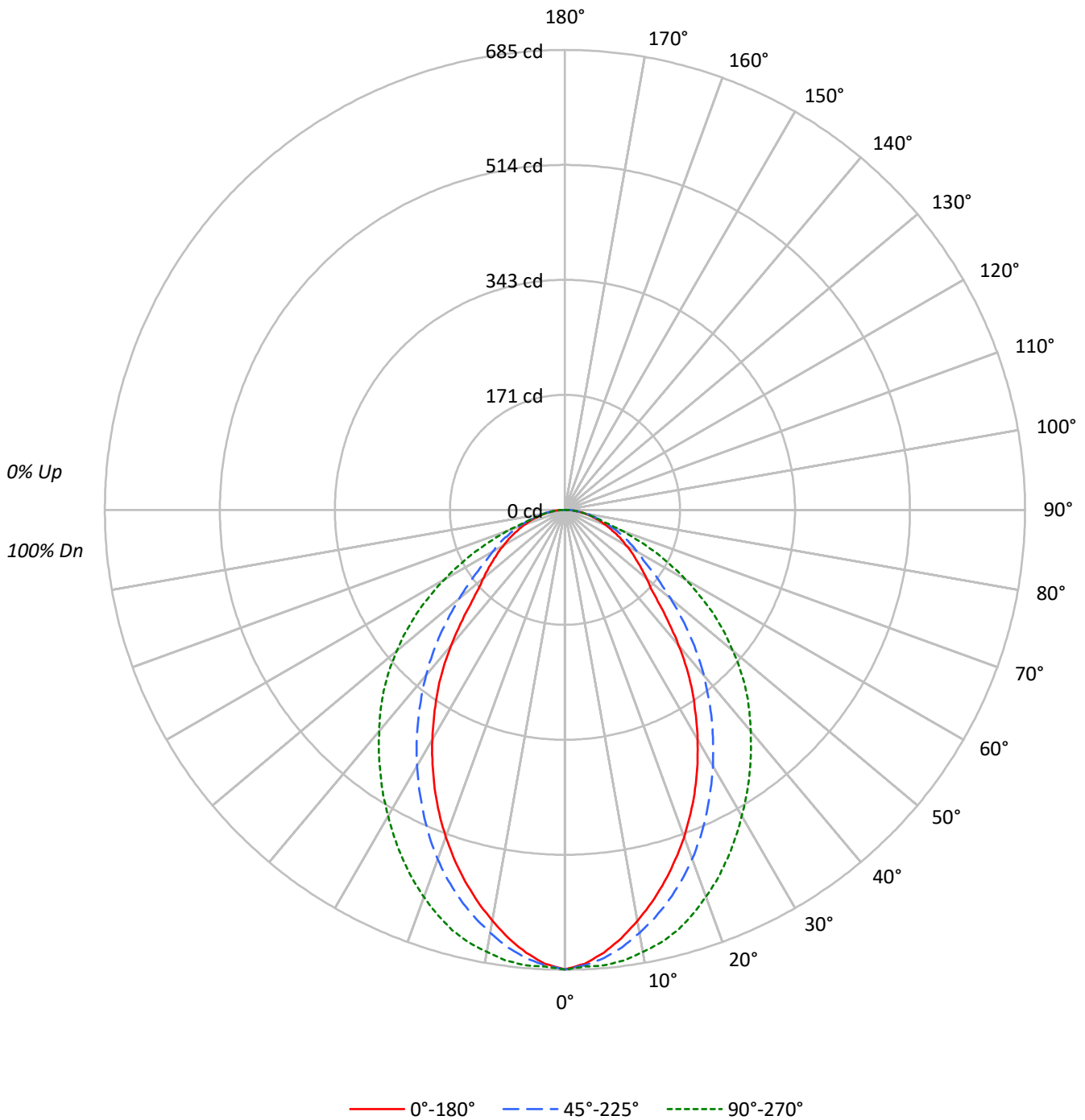
Lumens per Lamp: N/A
Luminaire Lumens: 1256.1 lumens
Efficiency: N/A
Efficacy: 64.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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: P1060533

CATALOG NUMBER: S124RDR-S575D940-X4F0-XX-UDD-WVL-W

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65				65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57				57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50				50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45				45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40				40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37				37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33				33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5895	5895	5895
5°	5724	5791	5886
10°	5435	5594	5848
15°	5109	5358	5779
20°	4752	5074	5624
25°	4357	4737	5440
30°	3928	4379	5235
35°	3477	4006	5037
40°	2955	3616	4835
45°	2420	3194	4648
50°	2118	2744	4374
55°	1946	2365	4048
60°	1805	2129	3568
65°	1691	1999	2987
70°	1586	1830	2243
75°	1491	1674	1634
80°	1384	1532	1384
85°	1255	1492	1196

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4648 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	5.0
10°-20°	170.2	13.6
20°-30°	232.7	18.5
30°-40°	244.5	19.5
40°-50°	212.2	16.9
50°-60°	160.1	12.7
60°-70°	103.8	8.3
70°-80°	53.3	4.2
80°-90°	16.1	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°	466.2	37.1
0°-40°	710.7	56.6
0°-60°	1083.0	86.2
0°-90°	1256.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1256.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	685	685	685	685	685	
5°	662	671	670	676	681	62
15°	573	587	601	628	648	161
25°	459	475	499	537	572	210
35°	331	349	381	432	479	206
45°	199	218	262	328	382	156
55°	130	133	158	224	270	117
65°	83	85	98	119	147	83
75°	45	50	50	51	49	48
85°	13	16	15	14	12	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	684.6	684.6	684.6	684.6	684.6
2.5°	676.7	685.2	679.1	680.3	680.9
5°	662.2	671.2	670.0	675.5	680.9
7.5°	643.4	654.3	656.7	667.6	676.7
10°	621.6	633.7	639.7	657.3	668.8
12.5°	598.5	610.7	621.6	644.0	660.3
15°	573.1	587.0	601.0	628.2	648.2
17.5°	546.4	561.0	578.6	608.2	631.9
20°	518.6	533.1	553.7	585.8	613.7
22.5°	488.9	505.3	527.1	561.6	594.3
25°	458.6	475.0	498.6	536.8	572.5
27.5°	427.1	444.1	469.5	511.9	550.1
30°	395.0	413.2	440.4	485.3	526.5
32.5°	362.3	381.7	410.7	458.6	503.4
35°	330.8	349.0	381.1	431.9	479.2
37.5°	298.1	316.2	350.8	405.9	455.0
40°	262.9	282.9	321.7	378.6	430.1
42.5°	230.2	250.2	292.0	352.6	406.5
45°	198.7	217.5	262.3	327.7	381.7
47.5°	174.5	187.8	232.6	303.5	355.0
50°	158.1	164.2	204.8	276.9	326.5
52.5°	143.6	148.4	179.3	250.2	298.7
55°	129.6	133.3	157.5	223.5	269.6
57.5°	117.5	119.3	138.1	196.9	238.1
60°	104.8	107.2	123.6	169.6	207.2
62.5°	94.5	95.7	110.9	143.6	176.3
65°	83.0	84.8	98.1	118.7	146.6
67.5°	72.7	75.7	84.8	96.9	115.7
70°	63.0	67.2	72.7	78.8	89.1
72.5°	53.9	58.8	61.8	64.2	62.4
75°	44.8	50.3	50.3	50.9	49.1
77.5°	36.3	41.2	40.6	40.0	37.6
80°	27.9	32.1	30.9	30.3	27.9
82.5°	20.6	23.6	22.4	21.8	18.8
85°	12.7	15.8	15.1	14.5	12.1
87.5°	6.1	9.1	8.5	7.9	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)