

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: P1060477

Luminaire Tested: S124RDR-S575D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060477
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-S575D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

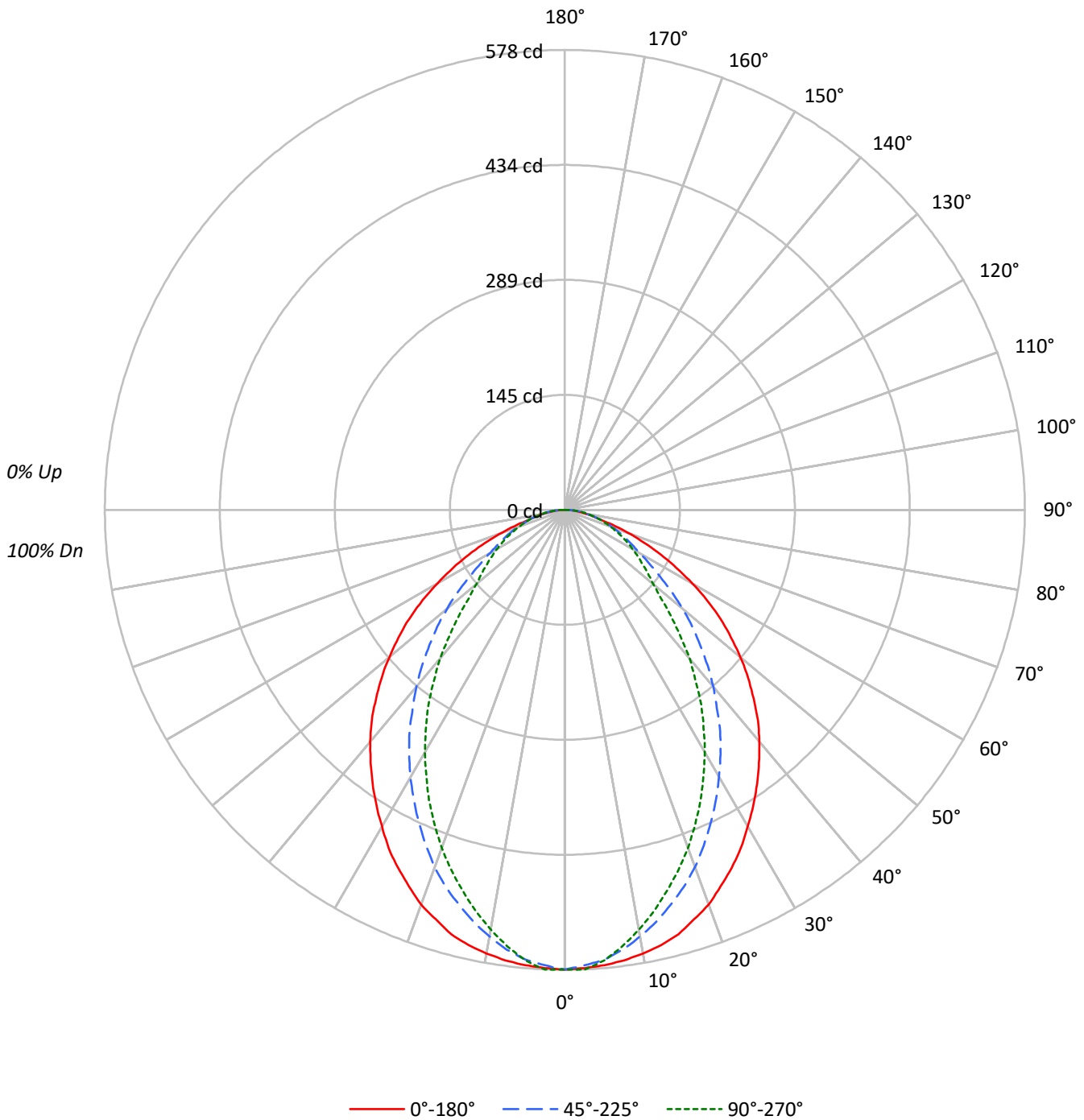
Lumens per Lamp: N/A
Luminaire Lumens: 1114.0 lumens
Efficiency: N/A
Efficacy: 56.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	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°	4976	4976	4976
5°	4965	4906	4912
10°	4951	4761	4684
15°	4921	4581	4418
20°	4840	4380	4144
25°	4716	4122	3832
30°	4570	3855	3497
35°	4425	3575	3140
40°	4274	3259	2739
45°	4084	2926	2291
50°	3857	2583	1937
55°	3588	2192	1794
60°	3181	1858	1695
65°	2712	1716	1606
70°	2120	1589	1521
75°	1447	1467	1467
80°	1245	1379	1413
85°	1077	1344	1472

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4084 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.8	4.8
10°-20°	146.0	13.1
20°-30°	202.7	18.2
30°-40°	217.2	19.5
40°-50°	192.5	17.3
50°-60°	145.0	13.0
60°-70°	93.9	8.4
70°-80°	48.2	4.3
80°-90°	14.8	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°	402.4	36.1
0°-40°	619.6	55.6
0°-60°	957.1	85.9
0°-90°	1114.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1114.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	578	578	578	578	578	
5°	574	575	568	568	568	55
15°	552	540	514	501	496	155
25°	496	470	434	411	403	228
35°	421	383	340	310	299	263
45°	335	292	240	203	188	259
55°	239	199	146	123	120	212
65°	133	107	84	79	79	132
75°	44	46	44	44	44	51
85°	11	12	14	15	15	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	577.8	577.8	577.8	577.8	577.8
2.5°	576.4	578.4	573.0	577.1	578.4
5°	574.4	575.1	567.6	568.3	568.3
7.5°	571.0	569.6	557.4	554.0	553.3
10°	566.2	562.2	544.5	537.7	535.7
12.5°	560.1	552.6	530.2	520.7	516.7
15°	552.0	539.7	513.9	501.0	495.6
17.5°	539.7	524.1	497.0	480.7	474.6
20°	528.2	507.2	478.0	457.6	452.2
22.5°	511.9	489.5	456.2	434.5	427.7
25°	496.3	469.8	433.8	410.8	403.3
27.5°	479.3	449.4	410.8	386.3	376.8
30°	459.6	427.7	387.7	361.9	351.7
32.5°	440.6	406.7	363.9	335.4	324.5
35°	420.9	382.9	340.1	309.6	298.7
37.5°	400.6	360.5	313.7	283.8	269.5
40°	380.2	338.1	289.9	256.0	243.7
42.5°	359.2	315.0	265.5	230.2	214.5
45°	335.4	291.9	240.3	203.0	188.1
47.5°	312.3	269.5	217.3	176.5	162.9
50°	287.9	245.8	192.8	153.4	144.6
52.5°	263.4	221.3	169.1	135.8	131.7
55°	239.0	198.9	146.0	122.9	119.5
57.5°	211.8	175.8	125.6	111.3	108.6
60°	184.7	150.7	107.9	100.5	98.4
62.5°	158.2	129.0	95.7	89.6	88.3
65°	133.1	107.3	84.2	79.4	78.8
67.5°	108.6	88.3	73.3	70.6	69.3
70°	84.2	70.6	63.1	61.8	60.4
72.5°	62.5	57.0	53.6	53.0	52.3
75°	43.5	45.5	44.1	44.1	44.1
77.5°	34.6	35.3	36.0	36.7	36.0
80°	25.1	27.2	27.8	29.2	28.5
82.5°	17.7	19.0	21.0	21.7	22.4
85°	10.9	11.5	13.6	14.9	14.9
87.5°	4.8	5.4	6.8	8.1	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)