

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: P1060462

Luminaire Tested: S124RDR-S575D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060462
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-S575D830-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, 80 CRI LEDS
Ballast/Driver: -

Summary

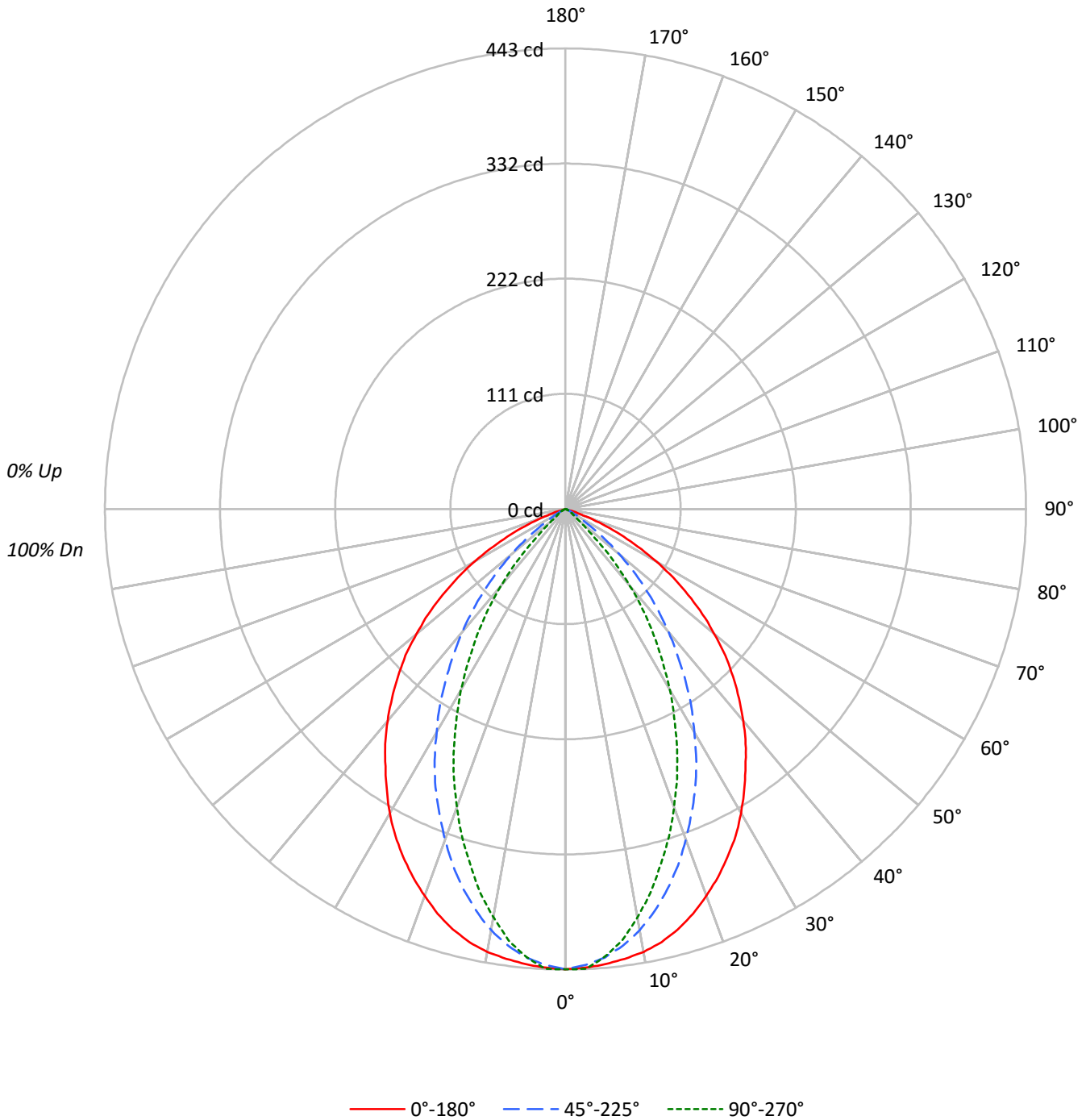
Lumens per Lamp: N/A
Luminaire Lumens: 578.2 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	3813	3813	3813
5°	3800	3745	3739
10°	3783	3598	3486
15°	3731	3377	3155
20°	3630	3102	2797
25°	3508	2809	2413
30°	3360	2462	1998
35°	3175	2112	1554
40°	2992	1733	1086
45°	2774	1332	538
50°	2504	900	180
55°	2162	461	125
60°	1731	165	88
65°	1186	92	39
70°	531	48	33
75°	0	20	20
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2774 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.9	7.1
10°-20°	107.2	18.5
20°-30°	138.8	24.0
30°-40°	131.8	22.8
40°-50°	93.4	16.1
50°-60°	47.9	8.3
60°-70°	16.8	2.9
70°-80°	1.4	0.2
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°	286.9	49.6
0°-40°	418.7	72.4
0°-60°	560.0	96.9
0°-90°	578.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	578.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	443	443	443	443	443	
5°	440	440	433	433	433	42
15°	418	406	379	361	354	118
25°	369	340	296	264	254	170
35°	302	258	201	162	148	189
45°	228	175	109	63	44	175
55°	144	95	31	9	8	129
65°	58	28	4	3	2	58
75°	0	1	1	1	1	5
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°	442.8	442.8	442.8	442.8	442.8
2.5°	441.5	442.8	439.0	442.2	442.8
5°	439.6	440.3	433.2	433.2	432.6
7.5°	436.4	435.1	423.6	419.1	418.5
10°	432.6	428.1	411.5	401.9	398.7
12.5°	426.8	418.5	396.1	382.0	378.2
15°	418.5	405.7	378.8	360.9	353.9
17.5°	408.3	391.6	359.6	337.9	330.8
20°	396.1	375.0	338.5	314.2	305.2
22.5°	383.3	359.0	316.8	289.2	280.3
25°	369.2	340.4	295.6	264.3	254.0
27.5°	354.5	320.6	272.6	240.0	226.5
30°	337.9	300.8	247.6	213.7	200.9
32.5°	320.0	279.0	225.3	188.8	173.4
35°	302.0	257.9	200.9	161.9	147.8
37.5°	284.8	238.0	176.6	135.7	122.2
40°	266.2	216.3	154.2	112.0	96.6
42.5°	247.0	195.2	131.2	87.7	71.0
45°	227.8	175.3	109.4	62.7	44.2
47.5°	208.6	154.2	88.3	39.7	23.7
50°	186.9	133.7	67.2	21.1	13.4
52.5°	166.4	114.5	48.0	12.2	10.2
55°	144.0	94.7	30.7	9.0	8.3
57.5°	122.9	75.5	17.3	7.0	6.4
60°	100.5	58.2	9.6	5.8	5.1
62.5°	78.1	42.2	6.4	3.8	3.2
65°	58.2	28.2	4.5	2.6	1.9
67.5°	38.4	16.0	3.2	1.3	1.3
70°	21.1	7.7	1.9	1.3	1.3
72.5°	7.7	2.6	1.3	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)