

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: P1060479

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060479
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-S575D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

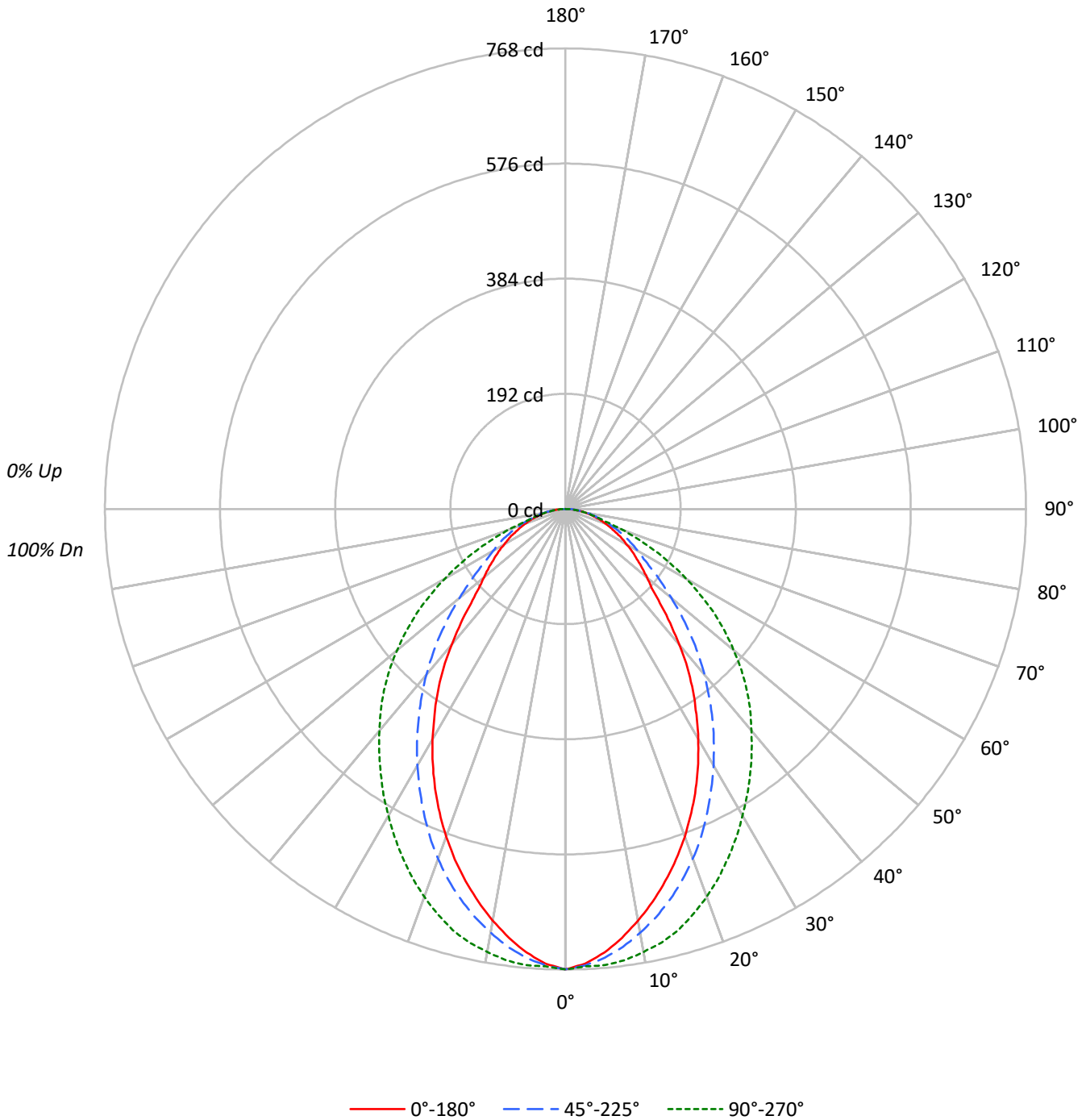
Lumens per Lamp: N/A
Luminaire Lumens: 1408.7 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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	100	97	97	97	96	93	91	92	90	89	87																
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87	87	87	87	87	87	87																
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	75	75	75	75	75	75	75	75	75																
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	65	65	65	65	65	65	65	65	65	65	65																
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57	57	57	57	57	57	57	57	57	57	57	57	57																
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50	50	50	50	50	50	50	50	50	50	50	50	50																
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45	45	45	45	45	45	45																
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40	40	40	40	40	40	40	40	40	40	40	40	40																
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37	37	37	37	37	37	37	37	37	37	37	37	37																
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33	33	33	33	33	33	33	33	33	33	33	33	33																
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31	31	31	31	31	31	31	31	31	31	31	31	31																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6611	6611	6611
5°	6419	6495	6601
10°	6095	6273	6558
15°	5730	6009	6480
20°	5330	5691	6307
25°	4887	5312	6100
30°	4405	4911	5871
35°	3899	4492	5649
40°	3315	4056	5423
45°	2713	3583	5212
50°	2375	3076	4906
55°	2183	2651	4538
60°	2024	2387	4002
65°	1897	2243	3350
70°	1780	2052	2515
75°	1674	1876	1830
80°	1552	1716	1552
85°	1413	1680	1344

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5212 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	5.0
10°-20°	190.9	13.6
20°-30°	260.9	18.5
30°-40°	274.2	19.5
40°-50°	238.0	16.9
50°-60°	179.5	12.7
60°-70°	116.4	8.3
70°-80°	59.7	4.2
80°-90°	18.1	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°	522.8	37.1
0°-40°	797.0	56.6
0°-60°	1214.5	86.2
0°-90°	1408.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1408.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	768	768	768	768	768	
5°	743	753	751	758	764	69
15°	643	658	674	704	727	180
25°	514	533	559	602	642	236
35°	371	391	427	484	537	231
45°	223	244	294	368	428	175
55°	145	150	177	251	302	131
65°	93	95	110	133	164	93
75°	50	56	56	57	55	53
85°	14	18	17	16	14	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	767.7	767.7	767.7	767.7	767.7
2.5°	758.9	768.4	761.6	763.0	763.6
5°	742.6	752.8	751.4	757.5	763.6
7.5°	721.5	733.7	736.5	748.7	758.9
10°	697.1	710.6	717.4	737.1	750.0
12.5°	671.2	684.8	697.1	722.2	740.5
15°	642.7	658.3	674.0	704.5	726.9
17.5°	612.8	629.1	648.8	682.1	708.6
20°	581.6	597.9	621.0	657.0	688.2
22.5°	548.3	566.6	591.1	629.8	666.5
25°	514.3	532.6	559.1	601.9	642.0
27.5°	479.0	498.0	526.5	574.1	616.9
30°	443.0	463.3	493.9	544.2	590.4
32.5°	406.3	428.0	460.6	514.3	564.6
35°	370.9	391.3	427.3	484.4	537.4
37.5°	334.3	354.6	393.4	455.2	510.2
40°	294.9	317.3	360.8	424.6	482.4
42.5°	258.2	280.6	327.5	395.4	455.9
45°	222.8	243.9	294.2	367.5	428.0
47.5°	195.7	210.6	260.9	340.4	398.1
50°	177.3	184.1	229.6	310.5	366.2
52.5°	161.0	166.5	201.1	280.6	334.9
55°	145.4	149.5	176.6	250.7	302.3
57.5°	131.8	133.8	154.9	220.8	267.0
60°	117.5	120.3	138.6	190.2	232.4
62.5°	106.0	107.3	124.3	161.0	197.7
65°	93.1	95.1	110.1	133.2	164.4
67.5°	81.5	84.9	95.1	108.7	129.8
70°	70.7	75.4	81.5	88.3	99.9
72.5°	60.5	65.9	69.3	72.0	70.0
75°	50.3	56.4	56.4	57.1	55.0
77.5°	40.8	46.2	45.5	44.8	42.1
80°	31.3	36.0	34.6	34.0	31.3
82.5°	23.1	26.5	25.1	24.5	21.1
85°	14.3	17.7	17.0	16.3	13.6
87.5°	6.8	10.2	9.5	8.8	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)