

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: P998511

Luminaire Tested: S124DR-B575DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998511
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DR-B575DB27-4F0-XX-W2A-F
Description: Define 4 Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

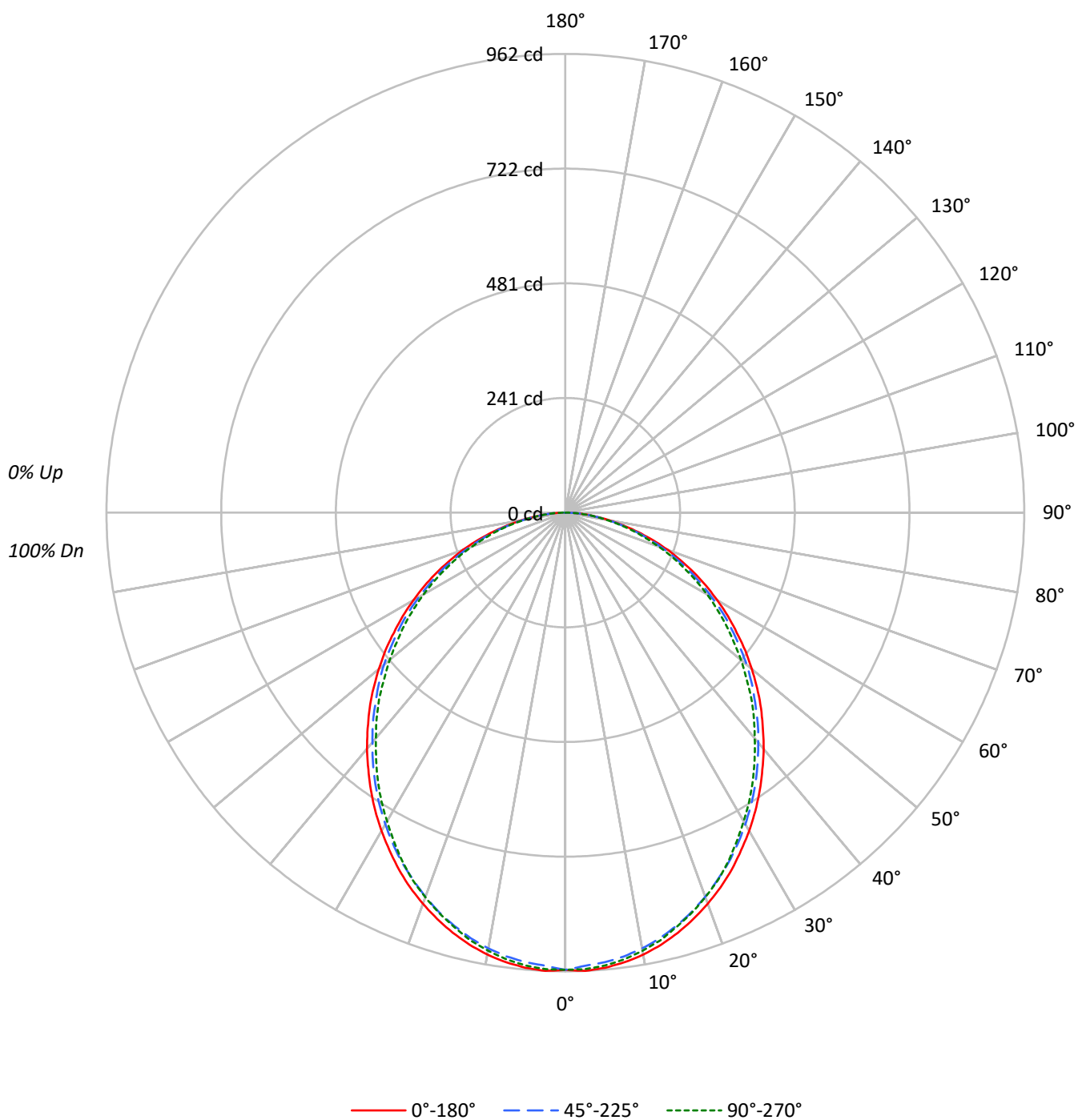
Lumens per Lamp: N/A
Luminaire Lumens: 2461.0 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70
4	83	71	63	56	81	70	62	56	67	60	55		65	59	54		63
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		52
7	66	52	44	38	64	52	43	37	50	43	37		49	42	37		47
8	61	48	39	34	60	47	39	34	46	39	33		45	38	33		43
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	52	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7819	7819	7819
5°	7843	7748	7804
10°	7793	7685	7723
15°	7699	7576	7595
20°	7574	7440	7447
25°	7431	7286	7265
30°	7256	7104	7038
35°	7075	6914	6822
40°	6886	6698	6575
45°	6690	6486	6361
50°	6471	6296	6101
55°	6237	6051	5855
60°	6002	5777	5600
65°	5736	5515	5293
70°	5441	5167	4964
75°	4987	4745	4622
80°	4438	4259	4151
85°	3883	3742	3668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6690 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	3.7
10°-20°	254.6	10.3
20°-30°	374.7	15.2
30°-40°	435.6	17.7
40°-50°	435.5	17.7
50°-60°	380.9	15.5
60°-70°	282.8	11.5
70°-80°	160.5	6.5
80°-90°	46.0	1.9
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°	719.7	29.2
0°-40°	1155.3	46.9
0°-60°	1971.8	80.1
0°-90°	2461.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2461.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	958	955	946	955	953	91
15°	912	909	897	902	900	257
25°	826	820	810	810	808	380
35°	711	705	694	689	685	444
45°	580	575	562	554	552	447
55°	439	436	426	416	412	393
65°	297	294	286	278	274	294
75°	158	154	151	148	147	168
85°	42	42	40	40	39	47
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	958.8	958.8	958.8	958.8	958.8
2.5°	961.9	959.6	951.1	958.8	958.1
5°	958.1	955.0	946.5	955.0	953.4
7.5°	951.1	948.1	938.8	945.8	945.0
10°	941.2	938.1	928.1	934.2	932.7
12.5°	928.1	925.0	914.3	921.2	918.9
15°	912.0	908.9	897.4	902.0	899.7
17.5°	893.5	889.7	878.9	882.0	880.5
20°	872.8	868.9	857.4	859.7	858.2
22.5°	850.5	845.1	833.6	838.2	835.1
25°	825.9	820.5	809.8	810.5	807.5
27.5°	798.2	792.9	782.9	781.3	777.5
30°	770.6	764.4	754.5	751.4	747.5
32.5°	741.4	736.0	725.3	721.4	717.6
35°	710.7	705.3	694.5	689.2	685.3
37.5°	678.4	673.8	662.3	656.9	651.5
40°	646.9	640.8	629.2	621.5	617.7
42.5°	613.1	610.0	597.0	587.7	585.4
45°	580.1	574.7	562.4	553.9	551.6
47.5°	545.5	541.6	530.1	520.9	514.8
50°	510.1	507.1	496.3	485.6	480.9
52.5°	475.6	471.7	460.2	451.0	444.8
55°	438.7	436.4	425.6	416.4	411.8
57.5°	404.1	401.8	391.1	381.8	377.2
60°	368.0	364.2	354.2	347.3	343.4
62.5°	332.7	329.6	318.8	312.7	308.9
65°	297.3	293.5	285.8	278.1	274.3
67.5°	261.2	258.1	250.5	242.8	242.0
70°	228.2	222.8	216.7	210.5	208.2
72.5°	192.8	187.5	182.9	178.2	175.9
75°	158.3	154.4	150.6	147.5	146.7
77.5°	124.5	122.9	119.1	118.3	116.0
80°	94.5	92.2	90.7	89.1	88.4
82.5°	65.3	64.5	64.5	63.8	63.0
85°	41.5	41.5	40.0	40.0	39.2
87.5°	20.0	19.2	18.4	18.4	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)