

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: P1001092

Luminaire Tested: S124RDR-B575DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001092
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-B575DB30-4F0-XX-W2A-F
Description: Define 4 Regressed Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

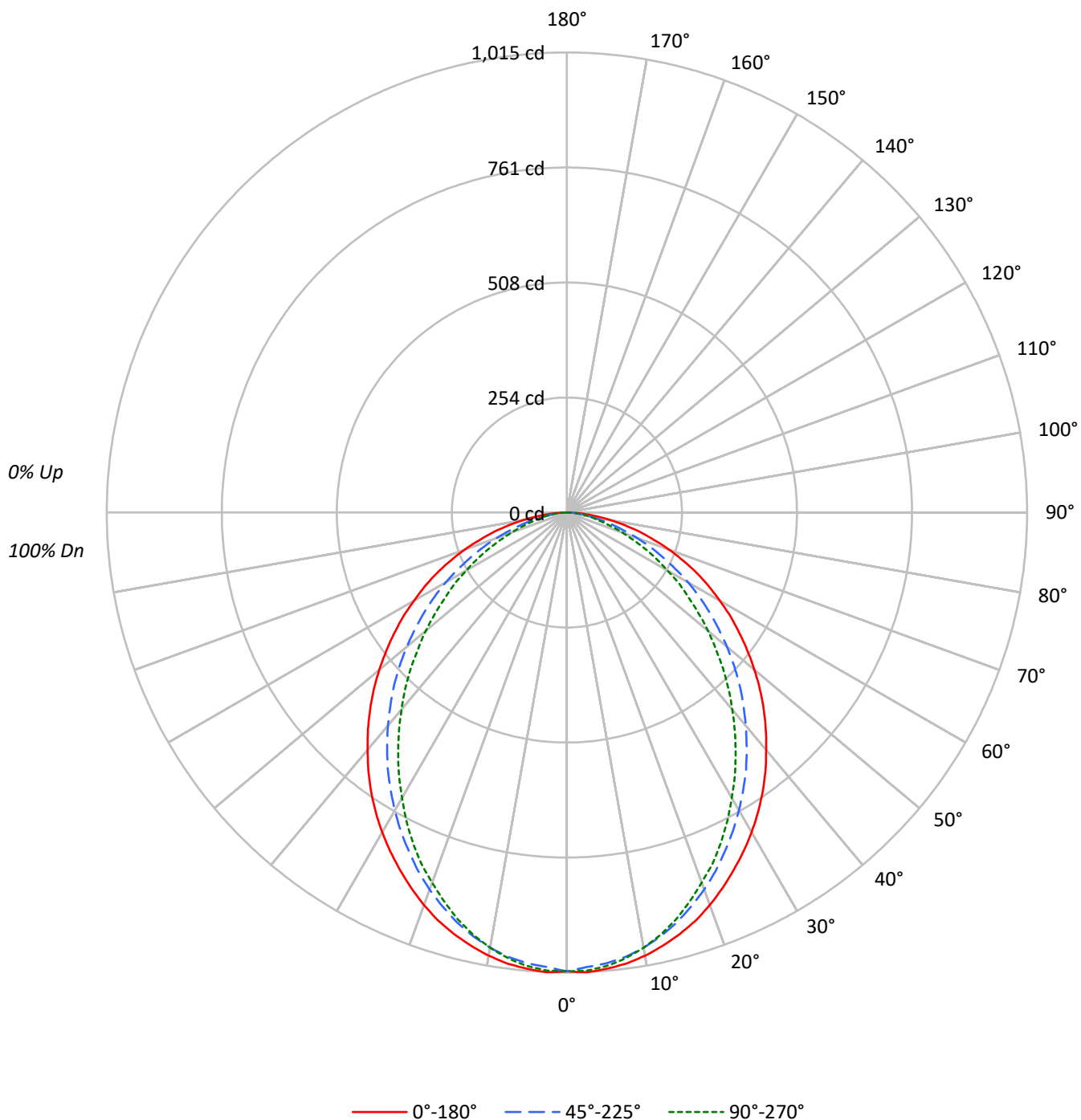
Lumens per Lamp: N/A
Luminaire Lumens: 2339.0 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	87	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	74	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	64	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	56	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	49	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	43	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	39	39	37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	35	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	32	32	30
10	55	42	35	29	54	42	34	29	41	34	29	40	33	29	39	33	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8255	8255	8255
5°	8273	8172	8222
10°	8221	8074	8074
15°	8127	7904	7846
20°	7997	7682	7540
25°	7831	7420	7232
30°	7670	7145	6845
35°	7492	6860	6459
40°	7277	6535	6040
45°	7080	6212	5614
50°	6853	5841	5162
55°	6612	5455	4672
60°	6346	5031	4172
65°	6101	4502	3680
70°	5748	3917	3123
75°	5299	3248	2539
80°	4621	2475	2329
85°	3920	2245	2105

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7080 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.2	4.1
10°-20°	265.4	11.3
20°-30°	383.2	16.4
30°-40°	434.3	18.6
40°-50°	419.3	17.9
50°-60°	348.6	14.9
60°-70°	240.6	10.3
70°-80°	121.6	5.2
80°-90°	30.9	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°	743.8	31.8
0°-40°	1178.0	50.4
0°-60°	1945.9	83.2
0°-90°	2339.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2339.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1012	1012	1012	1012	1012	
5°	1011	1008	998	1006	1004	96
15°	963	956	936	935	929	271
25°	870	856	825	812	804	401
35°	753	728	689	663	649	470
45°	614	585	539	501	487	473
55°	465	434	384	343	329	416
65°	316	283	233	200	191	312
75°	168	140	103	85	81	177
85°	42	26	24	22	22	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1012.3	1012.3	1012.3	1012.3	1012.3
2.5°	1015.4	1012.3	1003.8	1012.3	1011.5
5°	1010.7	1007.6	998.3	1006.1	1004.5
7.5°	1003.8	1000.7	989.0	994.5	992.1
10°	992.9	989.0	975.1	978.2	975.1
12.5°	979.0	974.3	957.3	958.8	954.2
15°	962.7	955.7	936.3	934.8	929.4
17.5°	944.1	934.0	911.5	907.6	899.9
20°	921.6	911.5	885.2	879.0	868.9
22.5°	896.8	885.2	856.5	846.4	838.7
25°	870.4	856.5	824.7	811.5	803.8
27.5°	843.3	826.3	792.9	777.4	766.6
30°	814.6	795.3	758.8	739.5	727.0
32.5°	784.4	761.9	723.9	700.7	689.1
35°	752.6	727.8	689.1	662.7	648.8
37.5°	719.3	693.7	651.1	622.4	608.5
40°	683.6	658.1	613.9	581.3	567.4
42.5°	649.5	622.4	575.9	542.6	527.8
45°	613.9	585.2	538.7	500.7	486.8
47.5°	577.5	548.0	499.9	460.4	444.9
50°	540.2	510.0	460.4	421.7	406.9
52.5°	502.3	472.8	421.7	382.1	366.6
55°	465.1	434.1	383.7	343.4	328.6
57.5°	428.6	396.1	346.5	305.4	294.5
60°	389.1	358.1	308.5	268.2	255.8
62.5°	353.4	320.9	269.7	233.3	224.0
65°	316.2	282.9	233.3	200.0	190.7
67.5°	277.5	245.7	199.2	169.7	158.9
70°	241.1	208.5	164.3	138.7	131.0
72.5°	202.3	173.6	132.5	111.6	104.6
75°	168.2	139.5	103.1	85.3	80.6
77.5°	132.5	107.7	76.7	64.3	62.8
80°	98.4	76.0	52.7	50.4	49.6
82.5°	69.0	48.8	38.0	36.4	35.7
85°	41.9	26.4	24.0	22.5	22.5
87.5°	17.8	11.6	10.9	10.1	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)