

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: P994998

Luminaire Tested: S123RDR-B560DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994998
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-B560DB50-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

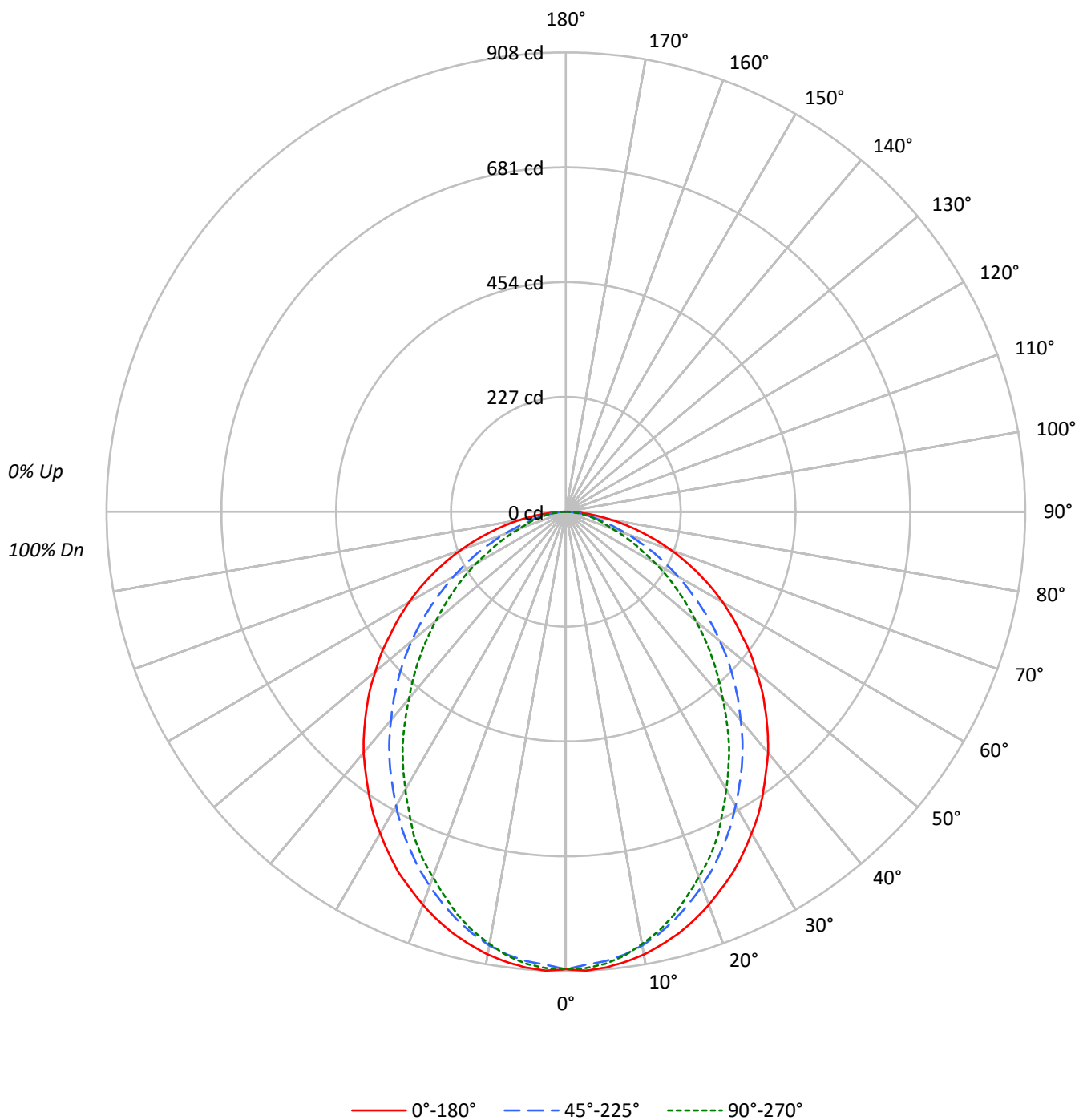
Lumens per Lamp: N/A
Luminaire Lumens: 2043.0 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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	110	105	101	98	107	103	99	96	99	96	93		95	93	90		91
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	92	82	75	68	90	81	74	68	78	72	67		75	70	66		73
4	85	73	65	59	83	72	64	58	70	63	58		67	62	57		65
5	78	66	57	51	76	65	57	51	63	56	50		61	55	50		59
6	73	60	51	45	71	59	51	45	57	50	45		55	49	44		54
7	67	54	46	40	66	54	46	40	52	45	40		51	44	39		49
8	63	50	42	36	61	49	41	36	48	41	36		47	40	36		46
9	59	46	38	33	58	45	38	33	44	37	32		43	37	32		42
10	55	43	35	30	54	42	35	30	41	34	30		40	34	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9734	9734	9734
5°	9771	9636	9692
10°	9716	9516	9483
15°	9611	9293	9195
20°	9468	9015	8804
25°	9321	8702	8423
30°	9125	8341	7885
35°	8925	7980	7391
40°	8738	7554	6781
45°	8496	7135	6231
50°	8229	6656	5613
55°	7955	6110	5037
60°	7705	5526	4405
65°	7379	4895	3775
70°	6971	4107	3046
75°	6376	3231	2865
80°	5684	2864	2634
85°	4804	2532	2359

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8496 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	4.2
10°-20°	236.5	11.6
20°-30°	340.5	16.7
30°-40°	383.4	18.8
40°-50°	366.8	18.0
50°-60°	300.2	14.7
60°-70°	202.4	9.9
70°-80°	101.5	5.0
80°-90°	26.5	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°	662.0	32.4
0°-40°	1045.4	51.2
0°-60°	1712.5	83.8
0°-90°	2043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	904	901	892	898	897	86
15°	862	854	834	830	825	243
25°	785	766	733	717	709	361
35°	679	653	607	576	562	425
45°	558	525	469	427	409	431
55°	424	388	326	283	268	380
65°	290	249	192	156	148	287
75°	153	118	78	70	69	163
85°	39	23	20	19	19	45
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	904.3	904.3	904.3	904.3	904.3
2.5°	908.0	905.0	896.2	904.3	902.8
5°	904.3	900.6	891.8	898.4	897.0
7.5°	897.7	894.0	883.0	887.4	885.2
10°	888.9	883.8	870.6	871.3	867.6
12.5°	876.4	870.6	853.7	853.0	848.6
15°	862.5	854.4	833.9	830.2	825.1
17.5°	845.6	836.8	811.2	803.8	796.5
20°	826.6	814.8	787.0	777.4	768.6
22.5°	805.3	791.4	761.3	748.8	740.8
25°	784.8	766.4	732.7	717.3	709.2
27.5°	759.8	740.0	703.4	682.8	670.3
30°	734.2	712.2	671.1	646.1	634.4
32.5°	708.5	682.8	638.8	610.9	598.5
35°	679.2	652.7	607.3	575.7	562.5
37.5°	649.8	621.2	573.5	538.3	522.2
40°	621.9	589.7	537.6	499.5	482.6
42.5°	590.4	558.1	503.9	461.3	446.7
45°	558.1	525.1	468.7	426.9	409.3
47.5°	526.6	489.9	434.2	388.7	373.3
50°	491.4	456.9	397.5	352.0	335.2
52.5°	459.9	421.7	363.0	315.4	300.7
55°	423.9	388.0	325.6	283.1	268.4
57.5°	391.6	352.8	289.7	249.4	236.9
60°	357.9	317.6	256.7	217.1	204.6
62.5°	324.2	283.8	223.0	186.3	173.1
65°	289.7	249.4	192.2	156.2	148.2
67.5°	255.2	214.2	158.4	131.3	122.5
70°	221.5	181.9	130.5	104.9	96.8
72.5°	187.8	148.9	103.4	83.6	81.4
75°	153.3	118.1	77.7	70.4	68.9
77.5°	121.7	89.5	60.9	56.5	55.0
80°	91.7	61.6	46.2	44.0	42.5
82.5°	63.1	38.1	33.0	30.8	30.8
85°	38.9	22.7	20.5	19.1	19.1
87.5°	17.6	9.5	9.5	8.8	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)