

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: P994988

Luminaire Tested: S123RDR-B560DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994988
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-B560DB2750-4F0-XX-W2A-F_3500K
Description: Define 3 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

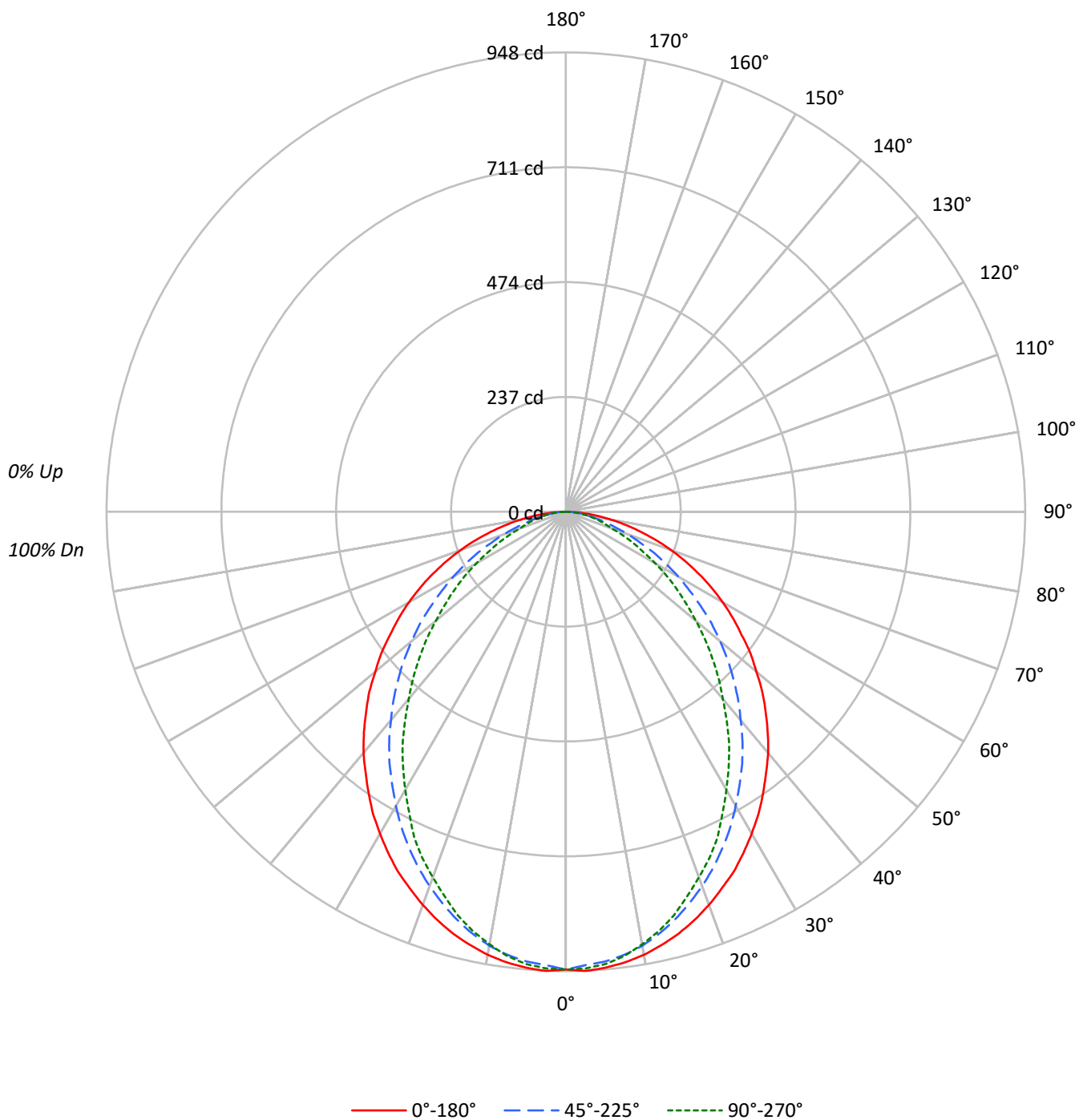
Lumens per Lamp: N/A
Luminaire Lumens: 2134.0 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P994988

CATALOG NUMBER: S123RDR-B560DB2750-4F0-XX-W2A-F_3500K

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°	10168	10168	10168
5°	10206	10066	10123
10°	10148	9940	9906
15°	10039	9706	9605
20°	9890	9416	9197
25°	9735	9089	8798
30°	9532	8713	8237
35°	9322	8335	7721
40°	9128	7890	7083
45°	8875	7451	6508
50°	8596	6953	5863
55°	8310	6382	5262
60°	8049	5772	4600
65°	7707	5112	3943
70°	7283	4293	3182
75°	6658	3377	2994
80°	5938	2994	2752
85°	5014	2655	2458

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8875 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	4.2
10°-20°	247.0	11.6
20°-30°	355.7	16.7
30°-40°	400.5	18.8
40°-50°	383.1	18.0
50°-60°	313.6	14.7
60°-70°	211.5	9.9
70°-80°	106.1	5.0
80°-90°	27.7	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°	691.5	32.4
0°-40°	1092.0	51.2
0°-60°	1788.8	83.8
0°-90°	2134.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2134.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	945	941	932	938	937	90
15°	901	892	871	867	862	254
25°	820	801	765	749	741	377
35°	709	682	634	601	588	444
45°	583	548	490	446	428	450
55°	443	405	340	296	280	397
65°	303	260	201	163	155	299
75°	160	123	81	74	72	171
85°	41	24	22	20	20	47
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	944.6	944.6	944.6	944.6	944.6
2.5°	948.4	945.4	936.2	944.6	943.1
5°	944.6	940.8	931.6	938.5	936.9
7.5°	937.7	933.9	922.4	927.0	924.7
10°	928.5	923.1	909.4	910.1	906.3
12.5°	915.5	909.4	891.7	891.0	886.4
15°	900.9	892.5	871.0	867.2	861.9
17.5°	883.3	874.1	847.3	839.6	832.0
20°	863.4	851.1	822.0	812.1	802.9
22.5°	841.2	826.6	795.2	782.2	773.8
25°	819.7	800.6	765.3	749.2	740.8
27.5°	793.7	773.0	734.7	713.2	700.2
30°	766.9	743.9	701.0	674.9	662.7
32.5°	740.0	713.2	667.3	638.2	625.1
35°	709.4	681.8	634.3	601.4	587.6
37.5°	678.8	648.9	599.1	562.3	545.5
40°	649.6	615.9	561.5	521.7	504.1
42.5°	616.7	583.0	526.3	481.9	466.6
45°	583.0	548.5	489.5	445.9	427.5
47.5°	550.1	511.7	453.5	406.0	389.9
50°	513.3	477.3	415.2	367.7	350.1
52.5°	480.3	440.5	379.2	329.4	314.1
55°	442.8	405.3	340.1	295.7	280.4
57.5°	409.1	368.5	302.6	260.5	247.4
60°	373.9	331.7	268.1	226.8	213.7
62.5°	338.6	296.5	232.9	194.6	180.8
65°	302.6	260.5	200.7	163.2	154.8
67.5°	266.6	223.7	165.5	137.1	127.9
70°	231.4	190.0	136.4	109.6	101.1
72.5°	196.1	155.5	108.0	87.3	85.0
75°	160.1	123.3	81.2	73.5	72.0
77.5°	127.2	93.5	63.6	59.0	57.5
80°	95.8	64.4	48.3	46.0	44.4
82.5°	65.9	39.8	34.5	32.2	32.2
85°	40.6	23.7	21.5	19.9	19.9
87.5°	18.4	10.0	10.0	9.2	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)