

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: P1037334

Luminaire Tested: S123DS-B560DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037334
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DS-B560DB2750-4F0-XX-W2A-F_3500K
Description: Define 3 Direct Surface with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

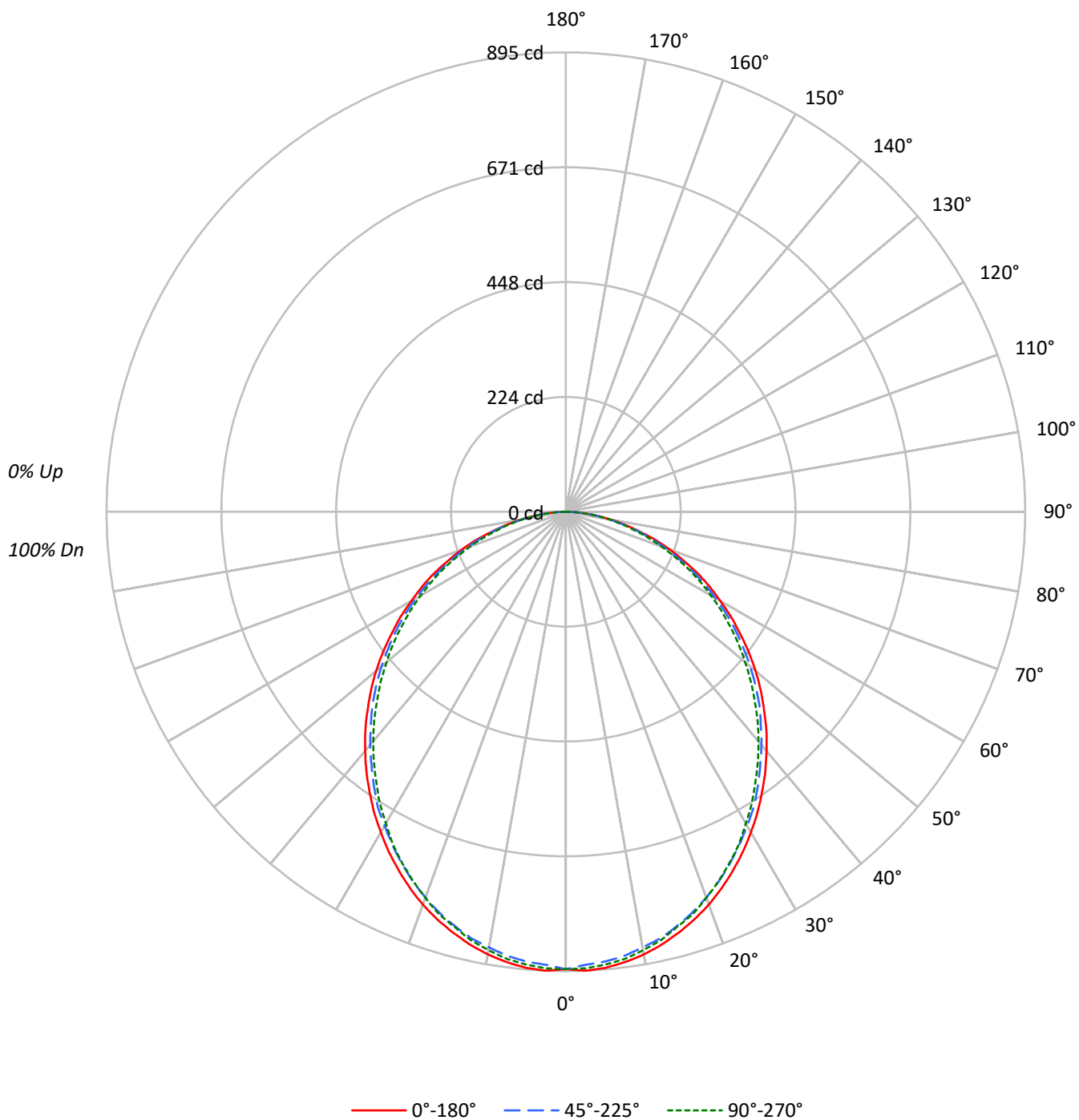
Lumens per Lamp: N/A
Luminaire Lumens: 2319.0 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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	109	104	100	96	106	102	98	95	98	94	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	62	56	81	70	62	55	67	60	55		65	59	54		63
5	76	64	55	48	74	63	54	48	60	53	47		58	52	47		57
6	71	57	49	42	69	56	48	42	55	47	42		53	46	41		51
7	66	52	43	37	64	51	43	37	50	42	37		48	42	37		47
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		43
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		40
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9591	9591	9591
5°	9636	9504	9570
10°	9571	9421	9480
15°	9460	9315	9332
20°	9329	9163	9171
25°	9155	8981	8963
30°	8961	8780	8713
35°	8759	8567	8457
40°	8547	8332	8203
45°	8316	8117	7919
50°	8083	7852	7634
55°	7779	7578	7347
60°	7472	7257	7027
65°	7200	6907	6693
70°	6801	6511	6222
75°	6213	5989	5735
80°	5604	5368	5318
85°	4915	4730	4545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8316 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.0	3.6
10°-20°	237.2	10.2
20°-30°	350.3	15.1
30°-40°	409.1	17.6
40°-50°	411.3	17.7
50°-60°	361.3	15.6
60°-70°	269.1	11.6
70°-80°	153.1	6.6
80°-90°	43.5	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°	671.5	29.0
0°-40°	1080.6	46.6
0°-60°	1853.3	79.9
0°-90°	2319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2319.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	892	888	880	887	886	85
15°	849	846	836	842	837	239
25°	771	766	756	757	755	355
35°	667	662	652	647	644	417
45°	546	543	533	524	520	422
55°	414	414	404	395	392	371
65°	283	279	271	265	263	279
75°	149	146	144	140	138	160
85°	40	38	38	37	37	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	891.0	891.0	891.0	891.0	891.0
2.5°	894.9	891.8	883.4	891.0	890.3
5°	891.8	888.0	879.6	887.2	885.7
7.5°	884.9	881.1	872.7	879.6	878.8
10°	875.7	871.9	861.9	868.8	867.3
12.5°	863.5	860.4	851.2	855.8	855.0
15°	848.9	845.8	835.9	842.0	837.4
17.5°	832.8	829.0	819.0	823.6	822.1
20°	814.4	809.8	799.9	802.9	800.6
22.5°	793.7	789.1	779.2	781.5	778.4
25°	770.8	766.2	756.2	757.0	754.7
27.5°	747.0	742.4	731.7	732.5	730.2
30°	721.0	717.1	706.4	706.4	701.0
32.5°	694.9	689.5	681.9	676.5	674.2
35°	666.6	662.0	652.0	647.4	643.6
37.5°	638.2	632.1	622.1	616.8	614.5
40°	608.3	603.7	593.0	586.9	583.8
42.5°	578.5	573.1	562.4	556.2	553.2
45°	546.3	543.2	533.2	524.1	520.2
47.5°	514.9	510.3	501.1	491.9	488.8
50°	482.7	478.9	468.9	460.5	455.9
52.5°	449.0	446.7	435.9	429.1	424.5
55°	414.5	413.7	403.8	395.3	391.5
57.5°	382.3	379.3	371.6	363.9	359.3
60°	347.1	346.3	337.1	330.2	326.4
62.5°	315.7	313.4	304.2	297.3	295.0
65°	282.7	278.9	271.2	265.1	262.8
67.5°	247.5	244.4	238.3	232.9	229.8
70°	216.1	211.5	206.9	201.5	197.7
72.5°	183.1	180.0	174.7	170.1	168.6
75°	149.4	146.3	144.0	140.2	137.9
77.5°	119.5	118.0	114.9	111.9	111.9
80°	90.4	88.1	86.6	85.8	85.8
82.5°	62.1	62.1	62.1	60.5	59.8
85°	39.8	38.3	38.3	36.8	36.8
87.5°	19.9	17.6	16.9	16.1	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)