

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: P1037231

Luminaire Tested: S123DS-B1000DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037231
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-B1000DB27-4F0-XX-W2A-F
Description: Define 3 Direct Surface with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

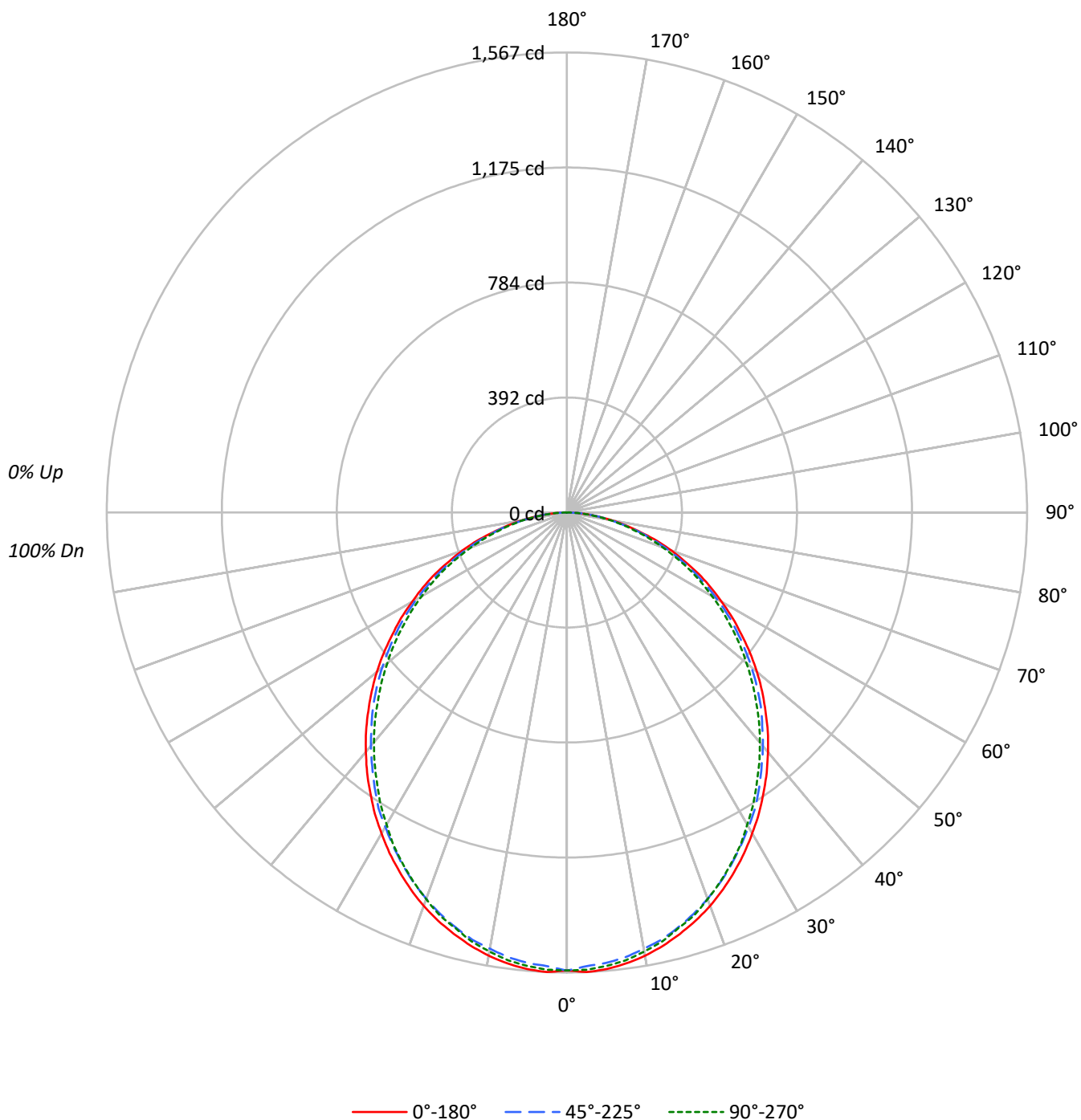
Lumens per Lamp: N/A
Luminaire Lumens: 4060.0 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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: P1037231

CATALOG NUMBER: S123DS-B1000DB27-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1037231

CATALOG NUMBER: S123DS-B1000DB27-4F0-XX-W2A-F

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°	16792	16792	16792
5°	16870	16639	16754
10°	16758	16493	16596
15°	16562	16308	16338
20°	16333	16041	16056
25°	16026	15724	15691
30°	15688	15371	15254
35°	15335	15000	14805
40°	14965	14588	14362
45°	14559	14212	13865
50°	14152	13747	13365
55°	13619	13266	12862
60°	13080	12706	12301
65°	12607	12093	11719
70°	11906	11399	10892
75°	10880	10489	10039
80°	9813	9397	9310
85°	8620	8287	7954

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14559 cd/sqm

TEST NUMBER: P1037231

CATALOG NUMBER: S123DS-B1000DB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	3.6
10°-20°	415.3	10.2
20°-30°	613.3	15.1
30°-40°	716.3	17.6
40°-50°	720.1	17.7
50°-60°	632.6	15.6
60°-70°	471.1	11.6
70°-80°	268.1	6.6
80°-90°	76.2	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°	1175.6	29.0
0°-40°	1891.9	46.6
0°-60°	3244.6	79.9
0°-90°	4060.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4060.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1560	1560	1560	1560	1560	
5°	1561	1555	1540	1553	1551	148
15°	1486	1481	1463	1474	1466	419
25°	1349	1341	1324	1325	1321	622
35°	1167	1159	1142	1134	1127	730
45°	956	951	934	918	911	738
55°	726	724	707	692	685	650
65°	495	488	475	464	460	488
75°	262	256	252	246	241	279
85°	70	67	67	64	64	80
90°	0	0	0	0	0	

TEST NUMBER: P1037231

CATALOG NUMBER: S123DS-B1000DB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1560.0	1560.0	1560.0	1560.0	1560.0
2.5°	1566.7	1561.3	1546.6	1560.0	1558.7
5°	1561.3	1554.6	1539.9	1553.3	1550.6
7.5°	1549.3	1542.6	1527.8	1539.9	1538.5
10°	1533.2	1526.5	1509.0	1521.1	1518.4
12.5°	1511.7	1506.3	1490.3	1498.3	1497.0
15°	1486.2	1480.9	1463.4	1474.2	1466.1
17.5°	1458.1	1451.4	1433.9	1442.0	1439.3
20°	1425.9	1417.8	1400.4	1405.7	1401.7
22.5°	1389.7	1381.6	1364.2	1368.2	1362.8
25°	1349.4	1341.4	1323.9	1325.3	1321.2
27.5°	1307.8	1299.8	1281.0	1282.3	1278.3
30°	1262.2	1255.5	1236.7	1236.7	1227.3
32.5°	1216.6	1207.2	1193.8	1184.4	1180.4
35°	1167.0	1158.9	1141.5	1133.5	1126.7
37.5°	1117.4	1106.6	1089.2	1079.8	1075.8
40°	1065.0	1057.0	1038.2	1027.5	1022.1
42.5°	1012.7	1003.3	984.6	973.8	968.5
45°	956.4	951.0	933.6	917.5	910.8
47.5°	901.4	893.3	877.3	861.2	855.8
50°	845.1	838.4	820.9	806.2	798.1
52.5°	786.0	782.0	763.2	751.2	743.1
55°	725.7	724.3	706.9	692.1	685.4
57.5°	669.3	664.0	650.6	637.1	629.1
60°	607.6	606.3	590.2	578.1	571.4
62.5°	552.6	548.6	532.5	520.4	516.4
65°	495.0	488.3	474.8	464.1	460.1
67.5°	433.3	427.9	417.2	407.8	402.4
70°	378.3	370.2	362.2	352.8	346.1
72.5°	320.6	315.2	305.8	297.8	295.1
75°	261.6	256.2	252.2	245.5	241.4
77.5°	209.3	206.6	201.2	195.8	195.8
80°	158.3	154.3	151.6	150.2	150.2
82.5°	108.7	108.7	108.7	106.0	104.6
85°	69.8	67.1	67.1	64.4	64.4
87.5°	34.9	30.9	29.5	28.2	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)