

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: P987494

Luminaire Tested: S122DR-B485DB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987494
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DR-B485DB2750-4F0-XX-W2A-F_4000K
Description: Define 2 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

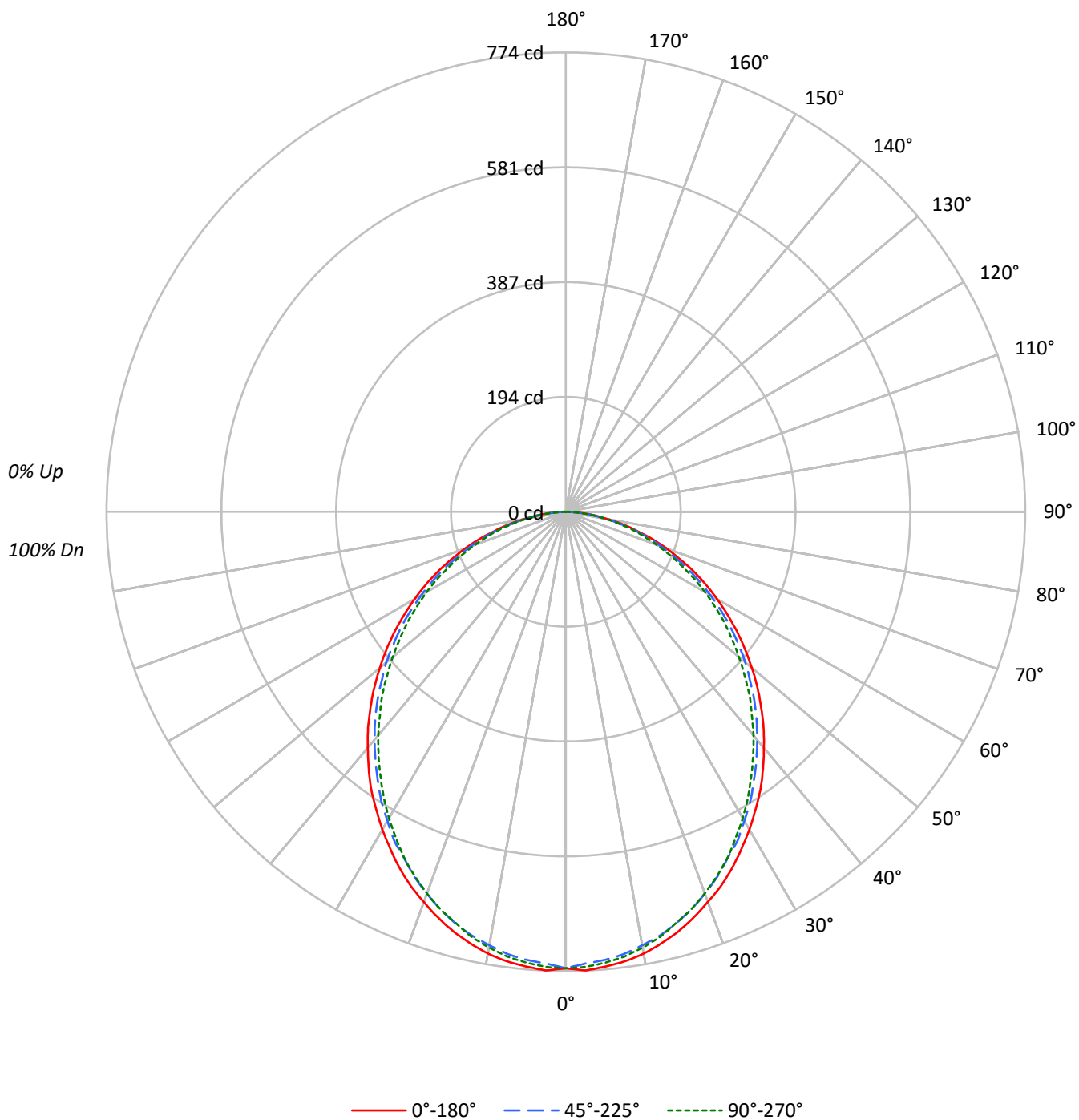
Lumens per Lamp: N/A
Luminaire Lumens: 1957.0 lumens
Efficiency: N/A
Efficacy: 81.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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: P987494

CATALOG NUMBER: S122DR-B485DB2750-4F0-XX-W2A-F_4000K

Luminous Intensity Polar Plot



TEST NUMBER: P987494

CATALOG NUMBER: S122DR-B485DB2750-4F0-XX-W2A-F_4000K

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	95	92		94	91	89		90
2	99	91	85	79	97	89	83	78	86	81	76		83	78	74		80
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		71
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63
5	77	64	55	49	75	63	55	48	61	53	48		59	52	47		57
6	71	58	49	43	69	57	48	42	55	48	42		53	47	42		52
7	66	52	44	38	64	52	43	38	50	43	37		49	42	37		47
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	53	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12176	12176	12176
5°	12222	12046	12118
10°	12150	11923	11983
15°	11999	11770	11757
20°	11787	11537	11525
25°	11575	11251	11251
30°	11301	10991	10896
35°	11048	10677	10520
40°	10729	10363	10164
45°	10414	10051	9803
50°	10072	9727	9380
55°	9717	9347	9002
60°	9320	8899	8570
65°	8892	8450	8060
70°	8354	7910	7530
75°	7602	7284	7101
80°	6746	6536	6199
85°	5503	5231	4704

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10414 cd/sqm

TEST NUMBER: P987494

CATALOG NUMBER: S122DR-B485DB2750-4F0-XX-W2A-F_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	3.7
10°-20°	203.7	10.4
20°-30°	299.3	15.3
30°-40°	347.7	17.8
40°-50°	347.2	17.7
50°-60°	302.8	15.5
60°-70°	223.8	11.4
70°-80°	126.6	6.5
80°-90°	33.4	1.7
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°	575.4	29.4
0°-40°	923.1	47.2
0°-60°	1573.1	80.4
0°-90°	1957.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1957.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	769	766	758	764	763	73
15°	732	728	718	721	717	206
25°	663	657	644	646	644	305
35°	572	564	552	548	544	357
45°	465	460	449	441	438	359
55°	352	348	339	330	326	315
65°	237	233	226	219	215	235
75°	124	123	119	115	116	133
85°	30	30	29	27	26	36
90°	0	0	0	0	0	

TEST NUMBER: P987494

CATALOG NUMBER: S122DR-B485DB2750-4F0-XX-W2A-F_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	769.2	769.2	769.2	769.2	769.2
2.5°	773.7	770.0	761.8	769.2	767.7
5°	769.2	766.3	758.1	764.0	762.6
7.5°	764.0	759.6	751.5	757.4	755.9
10°	755.9	750.7	741.8	747.8	745.5
12.5°	744.8	740.4	731.5	735.2	733.7
15°	732.2	727.8	718.2	721.1	717.4
17.5°	716.7	712.3	702.6	706.3	702.6
20°	699.7	695.2	684.9	687.1	684.2
22.5°	682.7	676.0	666.4	666.4	664.9
25°	662.7	656.8	644.2	645.7	644.2
27.5°	640.5	635.3	625.7	623.5	619.8
30°	618.3	612.4	601.3	599.1	596.1
32.5°	594.7	590.2	578.4	574.0	571.0
35°	571.7	564.3	552.5	548.1	544.4
37.5°	545.8	539.2	527.4	522.2	518.5
40°	519.2	513.3	501.5	494.8	491.9
42.5°	493.3	487.4	475.6	468.2	463.7
45°	465.2	460.0	449.0	440.8	437.9
47.5°	437.9	432.7	420.8	412.7	408.3
50°	409.0	405.3	395.0	384.6	380.9
52.5°	380.9	375.7	366.1	358.0	352.8
55°	352.1	347.6	338.7	329.9	326.2
57.5°	323.2	319.5	309.9	301.0	298.1
60°	294.4	291.4	281.1	272.9	270.7
62.5°	266.3	261.1	253.7	246.3	243.3
65°	237.4	233.0	225.6	218.9	215.2
67.5°	207.8	204.1	197.5	192.3	189.3
70°	180.5	177.5	170.9	165.7	162.7
72.5°	152.4	149.4	145.7	140.5	138.3
75°	124.3	122.8	119.1	114.6	116.1
77.5°	99.1	96.2	94.7	92.5	90.2
80°	74.0	73.2	71.7	69.5	68.0
82.5°	50.3	50.3	49.6	46.6	46.6
85°	30.3	29.6	28.8	26.6	25.9
87.5°	13.3	11.8	10.4	8.1	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)