

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: P987518

Luminaire Tested: S122DR-B675DB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987518
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DR-B675DB2750-4F0-XX-W2A-D_3500K
Description: Define 2 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

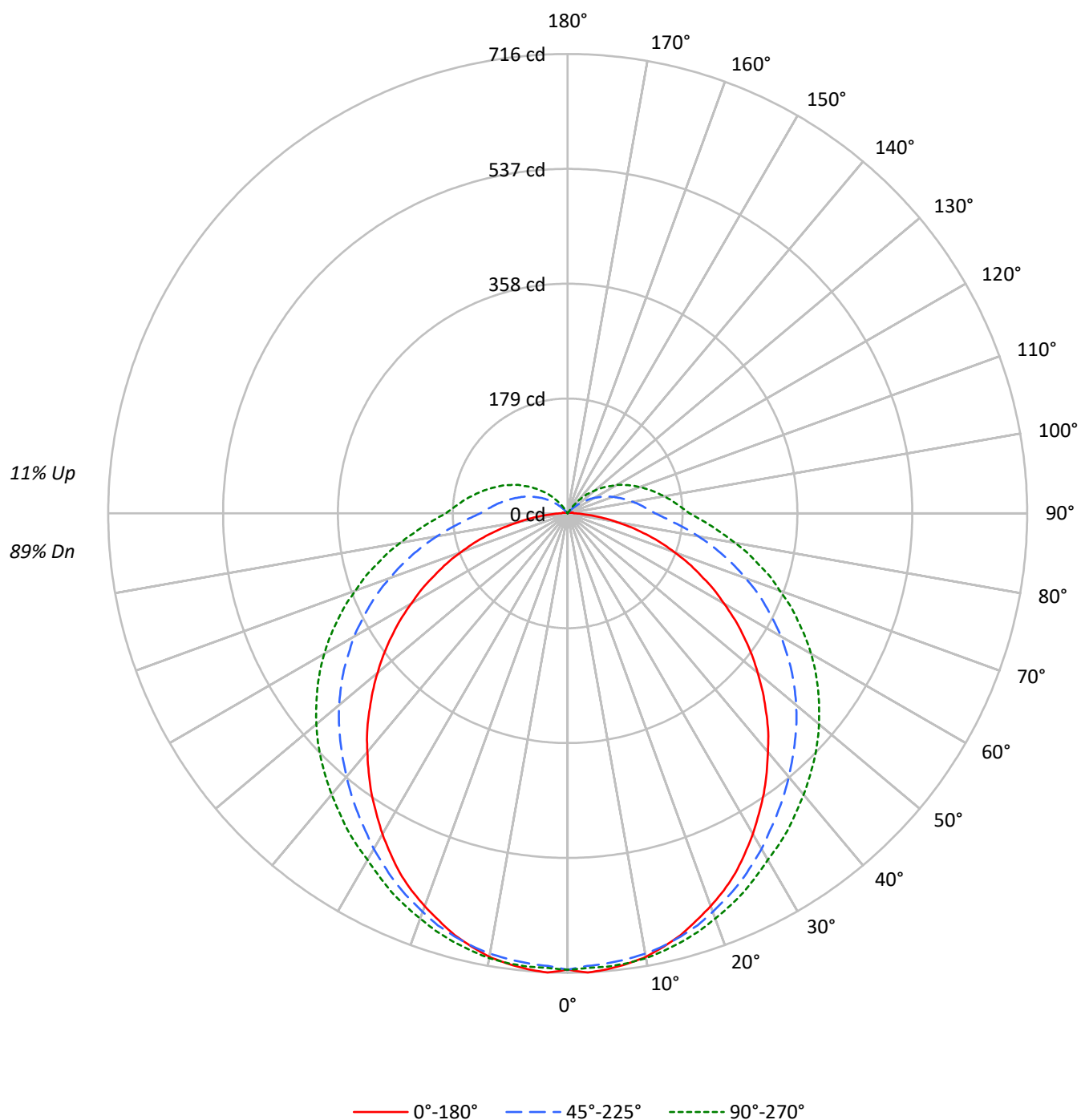
Lumens per Lamp: N/A
Luminaire Lumens: 2714.0 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 35.9
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: P987518

CATALOG NUMBER: S122DR-B675DB2750-4F0-XX-W2A-D_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	30	10
RCR																	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92
1	104	98	93	88	100	95	90	86	88	85	81	82	79	77	77	75	72
2	94	84	77	70	90	81	74	68	76	70	65	71	66	62	66	62	59
3	85	73	64	57	81	71	63	56	66	59	54	62	56	51	58	53	49
4	77	64	55	48	74	62	54	47	58	51	45	55	48	43	51	46	42
5	71	57	48	41	68	56	47	40	52	44	39	49	42	37	46	40	36
6	65	51	42	35	63	50	41	35	47	39	34	44	37	32	42	36	31
7	60	46	37	31	58	45	37	31	43	35	30	40	34	29	38	32	28
8	56	42	34	28	54	41	33	27	39	32	26	37	30	25	35	29	25
9	52	39	30	25	50	38	30	24	36	29	24	34	27	23	32	26	22
10	49	36	28	22	47	35	27	22	33	26	21	31	25	21	30	24	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11259	11259	11259
5°	11334	11188	11269
10°	11284	11200	11317
15°	11150	11183	11319
20°	10975	11131	11322
25°	10803	11091	11361
30°	10552	11042	11400
35°	10298	11017	11594
40°	10032	11076	11822
45°	9785	11215	12162
50°	9520	11449	12591
55°	9245	11748	13142
60°	8909	12173	13870
65°	8570	12742	14825
70°	8206	13644	16268
75°	7755	15320	18849
80°	7046	18888	24148
85°	6738	30331	40810

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 74829 cd/sqm

TEST NUMBER: P987518

CATALOG NUMBER: S122DR-B675DB2750-4F0-XX-W2A-D_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.4	2.5
10°-20°	193.4	7.1
20°-30°	293.0	10.8
30°-40°	356.8	13.1
40°-50°	383.9	14.1
50°-60°	372.8	13.7
60°-70°	325.6	12.0
70°-80°	250.6	9.2
80°-90°	167.8	6.2
90°-100°	115.8	4.3
100°-110°	84.6	3.1
110°-120°	55.8	2.1
120°-130°	31.1	1.1
130°-140°	13.1	0.5
140°-150°	2.2	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	553.8	20.4
0°-40°	910.7	33.6
0°-60°	1667.4	61.4
0°-90°	2411.4	88.9
90°-120°	256.2	9.4
90°-150°	302.6	11.1
90°-180°	303.0	11.2
0°-180°	2714.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	711	711	711	711	711	
5°	713	710	704	710	709	68
15°	680	682	682	692	691	192
25°	618	626	635	647	650	284
35°	533	550	570	593	600	333
45°	437	465	501	533	543	337
55°	335	372	426	463	476	300
65°	229	279	340	382	396	227
75°	127	184	250	295	308	134
85°	37	101	167	210	225	39
90°	10	70	136	177	190	7
95°	8	57	118	158	170	6
105°	5	35	89	125	136	6
115°	4	16	62	93	104	4
125°	2	2	35	63	72	2
135°	1	1	11	33	41	1
145°	0	0	0	6	11	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

TEST NUMBER: P987518

CATALOG NUMBER: S122DR-B675DB2750-4F0-XX-W2A-D_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	711.3	711.3	711.3	711.3	711.3
2.5°	716.4	713.3	706.1	711.3	709.2
5°	713.3	710.3	704.1	710.3	709.2
7.5°	708.2	706.1	701.0	708.2	707.2
10°	702.0	699.9	696.8	705.1	704.1
12.5°	691.7	692.7	690.7	698.9	697.9
15°	680.4	682.4	682.4	691.7	690.7
17.5°	665.9	670.0	673.1	682.4	682.4
20°	651.5	656.6	660.8	672.1	672.1
22.5°	636.0	642.2	648.4	659.7	661.8
25°	618.5	625.7	635.0	647.4	650.5
27.5°	597.9	609.2	619.5	635.0	637.1
30°	577.3	590.7	604.1	620.6	623.7
32.5°	554.6	570.1	586.5	606.1	612.3
35°	532.9	550.5	570.1	592.7	600.0
37.5°	509.2	528.8	553.6	578.3	585.5
40°	485.5	508.2	536.0	562.8	572.1
42.5°	462.8	485.5	518.5	548.4	557.7
45°	437.1	464.9	501.0	532.9	543.3
47.5°	412.3	442.2	483.5	516.5	527.8
50°	386.6	418.5	464.9	500.0	511.3
52.5°	361.8	395.8	445.3	481.4	493.8
55°	335.0	372.1	425.7	462.8	476.2
57.5°	309.3	350.5	404.1	444.3	457.7
60°	281.4	325.7	384.5	423.7	438.1
62.5°	256.7	303.1	361.8	404.1	417.5
65°	228.8	279.4	340.2	382.4	395.8
67.5°	204.1	256.7	318.5	360.8	375.2
70°	177.3	230.9	294.8	339.1	351.5
72.5°	152.6	208.2	273.2	316.5	331.9
75°	126.8	184.5	250.5	294.8	308.2
77.5°	102.1	161.8	228.8	273.2	287.6
80°	77.3	140.2	207.2	250.5	264.9
82.5°	56.7	118.5	186.6	229.9	243.3
85°	37.1	101.0	167.0	210.3	224.7
87.5°	22.7	84.5	150.5	192.8	206.2
90°	10.3	70.1	136.1	177.3	189.7
92.5°	9.3	63.9	126.8	167.0	179.4
95°	8.2	56.7	118.5	157.7	170.1
97.5°	7.2	51.5	111.3	149.5	161.8
100°	7.2	45.4	103.1	141.2	152.6
102.5°	6.2	40.2	95.9	133.0	144.3
105°	5.2	35.0	88.7	124.7	136.1
107.5°	5.2	29.9	81.4	116.5	127.8
110°	4.1	24.7	75.3	108.2	119.6



TEST NUMBER: P987518

CATALOG NUMBER: S122DR-B675DB2750-4F0-XX-W2A-D_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.1	20.6	68.0	101.0	112.4
115°	4.1	15.5	61.9	92.8	104.1
117.5°	3.1	11.3	54.6	85.6	95.9
120°	3.1	7.2	48.4	77.3	88.7
122.5°	3.1	4.1	42.3	70.1	79.4
125°	2.1	2.1	35.0	62.9	72.2
127.5°	2.1	1.0	28.9	54.6	63.9
130°	2.1	1.0	22.7	47.4	55.7
132.5°	2.1	1.0	16.5	40.2	48.4
135°	1.0	1.0	11.3	33.0	41.2
137.5°	1.0	1.0	6.2	25.8	33.0
140°	1.0	0.0	2.1	18.6	24.7
142.5°	1.0	0.0	0.0	12.4	17.5
145°	0.0	0.0	0.0	6.2	11.3
147.5°	0.0	0.0	0.0	1.0	4.1
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)