

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: P987547

Luminaire Tested: S122DR-B865DB2750-4F0-XX-W2A-D_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987547
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-B865DB2750-4F0-XX-W2A-D_3000K
Description: Define 2 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

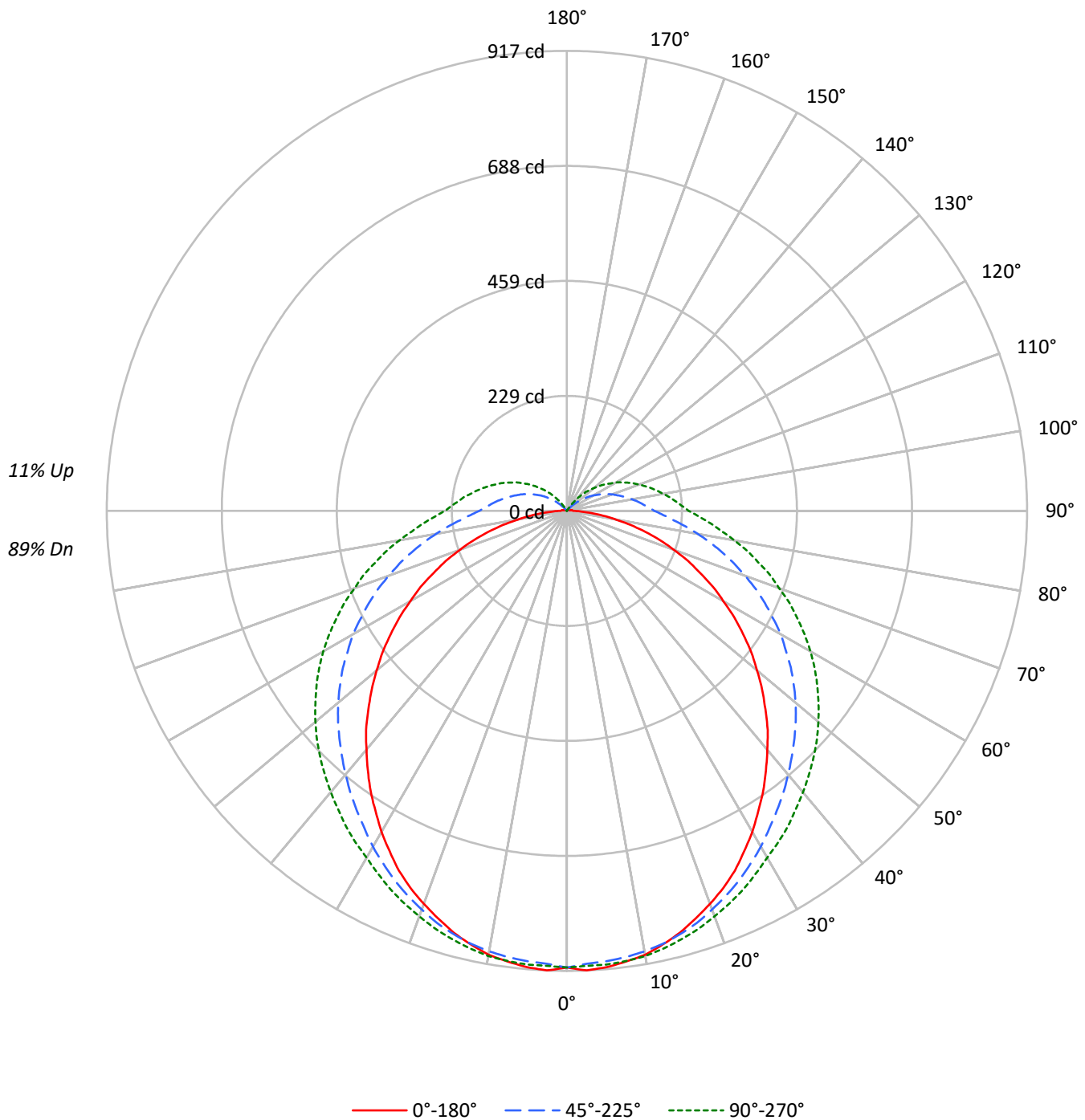
Lumens per Lamp: N/A
Luminaire Lumens: 3473.0 lumens
Efficiency: N/A
Efficacy: 74.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 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

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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	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°	14408	14408	14408
5°	14504	14317	14422
10°	14439	14333	14482
15°	14267	14311	14483
20°	14044	14244	14489
25°	13824	14193	14538
30°	13502	14129	14588
35°	13179	14097	14835
40°	12838	14173	15128
45°	12520	14352	15563
50°	12182	14650	16113
55°	11831	15035	16818
60°	11400	15576	17748
65°	10967	16304	18971
70°	10501	17462	20818
75°	9926	19602	24121
80°	9015	24166	30902
85°	8627	38812	52234

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 95732 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	2.5
10°-20°	247.5	7.1
20°-30°	375.0	10.8
30°-40°	456.6	13.1
40°-50°	491.3	14.1
50°-60°	477.1	13.7
60°-70°	416.7	12.0
70°-80°	320.7	9.2
80°-90°	214.8	6.2
90°-100°	148.2	4.3
100°-110°	108.2	3.1
110°-120°	71.4	2.1
120°-130°	39.8	1.1
130°-140°	16.7	0.5
140°-150°	2.8	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	708.7	20.4
0°-40°	1165.3	33.6
0°-60°	2133.7	61.4
0°-90°	3085.8	88.9
90°-120°	327.8	9.4
90°-150°	387.2	11.1
90°-180°	387.0	11.1
0°-180°	3473.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	913	909	901	909	908	87
15°	871	873	873	885	884	245
25°	792	801	813	828	832	364
35°	682	704	730	758	768	426
45°	559	595	641	682	695	432
55°	429	476	545	592	609	383
65°	293	358	435	489	506	291
75°	162	236	320	377	394	172
85°	48	129	214	269	288	50
90°	13	90	174	227	243	9
95°	11	73	152	202	218	8
105°	7	45	113	160	174	8
115°	5	20	79	119	133	5
125°	3	3	45	80	92	3
135°	1	1	14	42	53	1
145°	0	0	0	8	14	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

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	910.2	910.2	910.2	910.2	910.2
2.5°	916.8	912.8	903.6	910.2	907.6
5°	912.8	908.9	901.0	908.9	907.6
7.5°	906.2	903.6	897.0	906.2	904.9
10°	898.3	895.7	891.7	902.3	901.0
12.5°	885.1	886.5	883.8	894.4	893.1
15°	870.6	873.3	873.3	885.1	883.8
17.5°	852.2	857.4	861.4	873.3	873.3
20°	833.7	840.3	845.6	860.1	860.1
22.5°	813.9	821.8	829.7	844.2	846.9
25°	791.5	800.7	812.6	828.4	832.4
27.5°	765.1	779.6	792.8	812.6	815.2
30°	738.7	755.9	773.0	794.1	798.1
32.5°	709.7	729.5	750.6	775.6	783.6
35°	682.0	704.4	729.5	758.5	767.7
37.5°	651.6	676.7	708.4	740.0	749.3
40°	621.3	650.3	685.9	720.2	732.1
42.5°	592.3	621.3	663.5	701.8	713.6
45°	559.3	594.9	641.1	682.0	695.2
47.5°	527.7	565.9	618.7	660.9	675.4
50°	494.7	535.6	594.9	639.8	654.3
52.5°	463.0	506.5	569.9	616.0	631.9
55°	428.7	476.2	544.8	592.3	609.4
57.5°	395.7	448.5	517.1	568.5	585.7
60°	360.1	416.8	492.0	542.2	560.6
62.5°	328.5	387.8	463.0	517.1	534.2
65°	292.8	357.5	435.3	489.4	506.5
67.5°	261.2	328.5	407.6	461.7	480.2
70°	226.9	295.5	377.3	434.0	449.8
72.5°	195.2	266.5	349.6	405.0	424.8
75°	162.3	236.1	320.5	377.3	394.4
77.5°	130.6	207.1	292.8	349.6	368.0
80°	98.9	179.4	265.1	320.5	339.0
82.5°	72.6	151.7	238.8	294.2	311.3
85°	47.5	129.3	213.7	269.1	287.6
87.5°	29.0	108.2	192.6	246.7	263.8
90°	13.2	89.7	174.1	226.9	242.7
92.5°	11.9	81.8	162.3	213.7	229.5
95°	10.6	72.6	151.7	201.8	217.7
97.5°	9.2	66.0	142.5	191.3	207.1
100°	9.2	58.0	131.9	180.7	195.2
102.5°	7.9	51.4	122.7	170.2	184.7
105°	6.6	44.9	113.4	159.6	174.1
107.5°	6.6	38.3	104.2	149.1	163.6
110°	5.3	31.7	96.3	138.5	153.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.3	26.4	87.1	129.3	143.8
115°	5.3	19.8	79.1	118.7	133.2
117.5°	4.0	14.5	69.9	109.5	122.7
120°	4.0	9.2	62.0	98.9	113.4
122.5°	4.0	5.3	54.1	89.7	101.6
125°	2.6	2.6	44.9	80.5	92.3
127.5°	2.6	1.3	36.9	69.9	81.8
130°	2.6	1.3	29.0	60.7	71.2
132.5°	2.6	1.3	21.1	51.4	62.0
135°	1.3	1.3	14.5	42.2	52.8
137.5°	1.3	1.3	7.9	33.0	42.2
140°	1.3	0.0	2.6	23.7	31.7
142.5°	1.3	0.0	0.0	15.8	22.4
145°	0.0	0.0	0.0	7.9	14.5
147.5°	0.0	0.0	0.0	1.3	5.3
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)