

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: P1037220

Luminaire Tested: S122RDS-B865DB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037220
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDS-B865DB2750-4F0-XX-W2A-F_4000K
Description: Define 2 Regressed Direct Surface with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

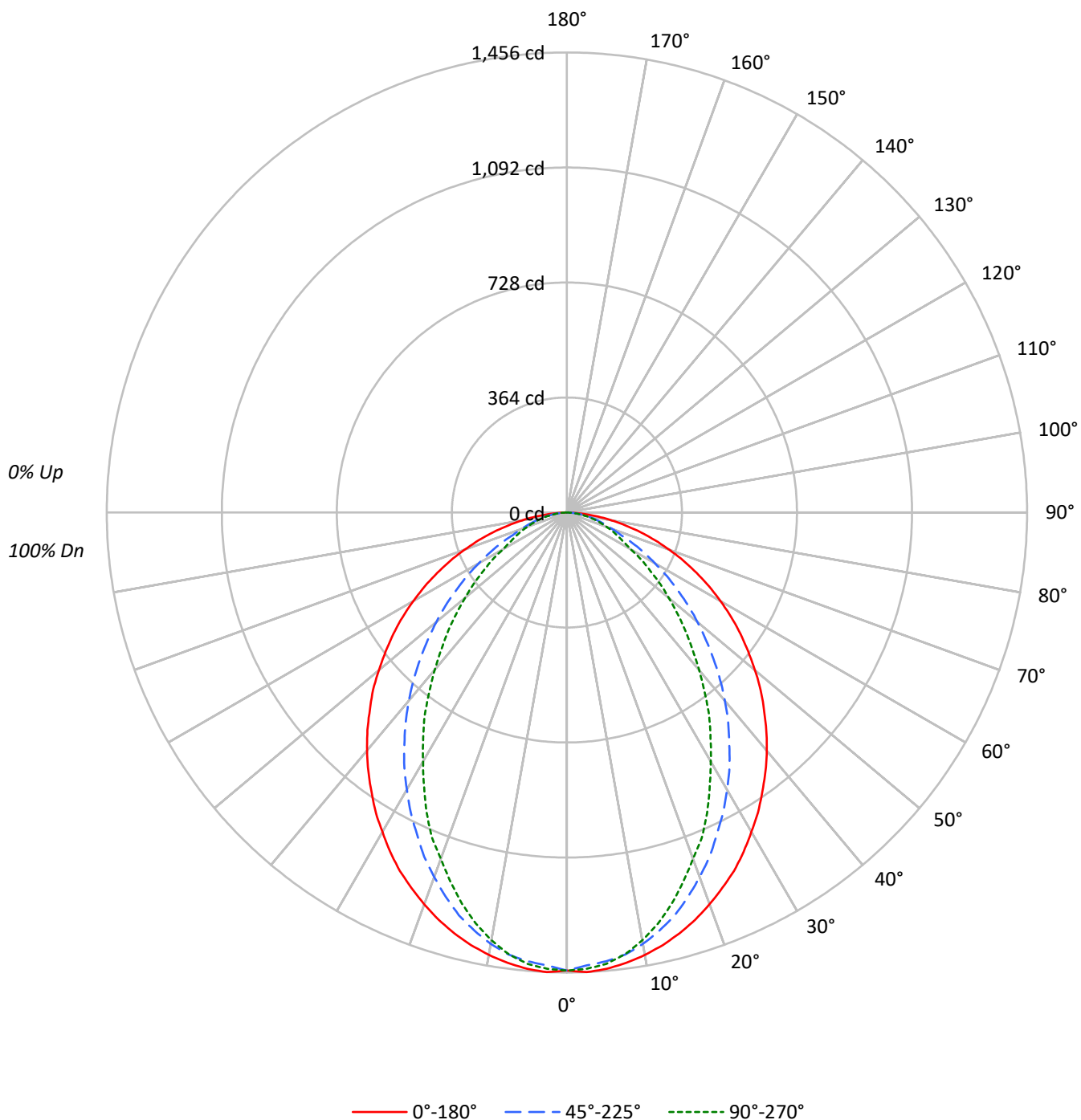
Lumens per Lamp: N/A
Luminaire Lumens: 2981.0 lumens
Efficiency: N/A
Efficacy: 63.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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

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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	76	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	66	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	57	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	51	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	45	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	41	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	37	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	34	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	31	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22945	22945	22945
5°	23032	22656	22781
10°	22855	22286	22096
15°	22592	21625	21002
20°	22229	20683	19643
25°	21857	19610	18328
30°	21338	18510	16639
35°	20835	17312	15158
40°	20329	16074	13444
45°	19733	14683	11891
50°	19122	13276	10370
55°	18499	11765	8906
60°	17773	10175	7392
65°	16949	8547	6731
70°	15967	7044	6192
75°	14764	6416	5773
80°	13035	5743	5260
85°	10243	4522	4522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 19733 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.8	4.6
10°-20°	372.9	12.5
20°-30°	523.6	17.6
30°-40°	570.7	19.1
40°-50°	524.5	17.6
50°-60°	412.0	13.8
60°-70°	268.1	9.0
70°-80°	138.0	4.6
80°-90°	35.3	1.2
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°	1032.3	34.6
0°-40°	1603.1	53.8
0°-60°	2539.6	85.2
0°-90°	2981.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2981.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1450	1443	1426	1438	1434	137
15°	1379	1364	1320	1295	1282	388
25°	1251	1209	1123	1069	1049	576
35°	1078	1011	896	813	784	675
45°	882	794	656	563	531	681
55°	670	568	426	348	323	599
65°	452	346	228	184	180	449
75°	241	150	105	96	94	255
85°	56	29	25	25	25	68
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1449.5	1449.5	1449.5	1449.5	1449.5
2.5°	1456.0	1449.5	1435.0	1448.1	1445.5
5°	1449.5	1442.9	1425.8	1437.7	1433.7
7.5°	1437.7	1429.8	1411.4	1416.7	1410.1
10°	1421.9	1412.7	1386.5	1382.6	1374.7
12.5°	1402.2	1390.4	1355.0	1347.1	1332.7
15°	1378.6	1364.2	1319.6	1294.7	1281.6
17.5°	1351.1	1330.1	1275.0	1246.1	1225.2
20°	1319.6	1293.4	1227.8	1195.0	1166.1
22.5°	1285.5	1255.3	1179.2	1134.6	1115.0
25°	1251.4	1209.4	1122.8	1069.1	1049.4
27.5°	1210.7	1166.1	1070.4	1008.7	978.5
30°	1167.4	1117.6	1012.7	945.8	910.3
32.5°	1125.5	1065.1	957.6	878.9	846.1
35°	1078.2	1011.3	895.9	813.3	784.4
37.5°	1032.3	960.2	838.2	747.7	714.9
40°	983.8	905.1	777.9	684.7	650.6
42.5°	934.0	850.0	717.5	620.4	587.7
45°	881.5	793.6	655.9	562.7	531.2
47.5°	831.6	738.5	596.8	503.7	474.8
50°	776.5	683.4	539.1	448.6	421.1
52.5°	722.8	624.4	484.0	397.5	372.5
55°	670.3	568.0	426.3	347.6	322.7
57.5°	616.5	511.6	375.2	301.7	280.7
60°	561.4	456.5	321.4	254.5	233.5
62.5°	507.6	402.7	275.5	212.5	202.0
65°	452.5	346.3	228.2	183.6	179.7
67.5°	400.1	293.8	183.6	161.3	157.4
70°	345.0	242.7	152.2	139.0	133.8
72.5°	292.5	195.4	127.2	116.7	114.1
75°	241.4	149.5	104.9	95.8	94.4
77.5°	190.2	106.2	82.6	77.4	74.8
80°	143.0	76.1	63.0	57.7	57.7
82.5°	99.7	51.2	43.3	40.7	40.7
85°	56.4	28.9	24.9	24.9	24.9
87.5°	21.0	10.5	10.5	9.2	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)