

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: P989010

Luminaire Tested: S122RDR-B865DB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P989010
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: S122RDR-B865DB2750-4F0-XX-W2A-F_5000K
Description: Define 2 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

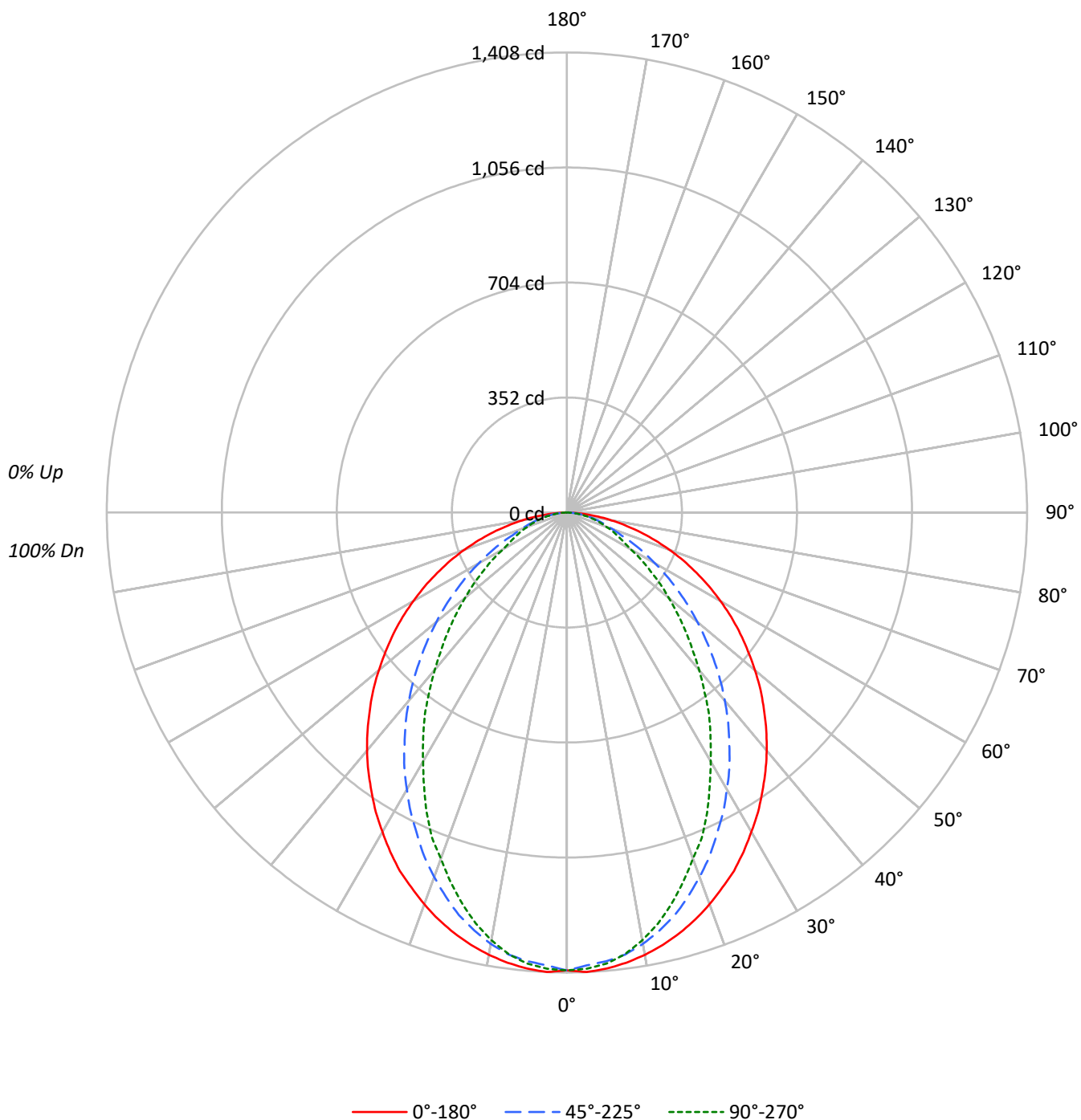
Lumens per Lamp: N/A
Luminaire Lumens: 2882.0 lumens
Efficiency: N/A
Efficacy: 61.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P989010

CATALOG NUMBER: S122RDR-B865DB2750-4F0-XX-W2A-F_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P989010

CATALOG NUMBER: S122RDR-B865DB2750-4F0-XX-W2A-F_5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10		0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102		100
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92	90	88		86
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82	79	76		74
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74	69	66		64
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66	62	57		55
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60	55	51		49
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55	50	45		43
7	68	56	47	42	67	55	47	42	53	46	41		52	46	41		51	45	41		39
8	64	51	43	38	62	51	43	37	49	42	37		48	42	37		47	41	37		35
9	60	47	39	34	59	47	39	34	46	39	34		44	38	34		44	38	34		32
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41	35	31		29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22182	22182	22182
5°	22266	21904	22025
10°	22096	21546	21362
15°	21842	20907	20304
20°	21491	19995	18991
25°	21130	18959	17719
30°	20630	17894	16087
35°	20143	16738	14655
40°	19653	15539	12997
45°	19077	14195	11497
50°	18489	12835	10025
55°	17883	11376	8610
60°	17184	9836	7145
65°	16387	8266	6506
70°	15435	6808	5989
75°	14269	6208	5584
80°	12598	5551	5087
85°	9898	4377	4377

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 19077 cd/sqm

TEST NUMBER: P989010

CATALOG NUMBER: S122RDR-B865DB2750-4F0-XX-W2A-F_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	4.6
10°-20°	360.5	12.5
20°-30°	506.2	17.6
30°-40°	551.8	19.1
40°-50°	507.1	17.6
50°-60°	398.3	13.8
60°-70°	259.2	9.0
70°-80°	133.5	4.6
80°-90°	34.1	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°	998.1	34.6
0°-40°	1549.8	53.8
0°-60°	2455.2	85.2
0°-90°	2882.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2882.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1401	1401	1401	1401	1401	
5°	1401	1395	1378	1390	1386	133
15°	1333	1319	1276	1252	1239	376
25°	1210	1169	1086	1034	1014	556
35°	1042	978	866	786	758	652
45°	852	767	634	544	514	658
55°	648	549	412	336	312	579
65°	438	335	221	178	174	434
75°	233	145	102	93	91	247
85°	54	28	24	24	24	65
90°	0	0	0	0	0	

TEST NUMBER: P989010

CATALOG NUMBER: S122RDR-B865DB2750-4F0-XX-W2A-F_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1401.3	1401.3	1401.3	1401.3	1401.3
2.5°	1407.7	1401.3	1387.4	1400.1	1397.5
5°	1401.3	1395.0	1378.5	1389.9	1386.1
7.5°	1389.9	1382.3	1364.5	1369.6	1363.3
10°	1374.7	1365.8	1340.5	1336.6	1329.0
12.5°	1355.7	1344.3	1310.0	1302.4	1288.5
15°	1332.8	1318.9	1275.8	1251.7	1239.0
17.5°	1306.2	1285.9	1232.7	1204.8	1184.5
20°	1275.8	1250.4	1187.0	1155.3	1127.4
22.5°	1242.8	1213.6	1140.1	1097.0	1077.9
25°	1209.8	1169.2	1085.5	1033.6	1014.5
27.5°	1170.5	1127.4	1034.8	975.2	946.1
30°	1128.7	1080.5	979.0	914.3	880.1
32.5°	1088.1	1029.8	925.8	849.7	818.0
35°	1042.4	977.8	866.2	786.3	758.4
37.5°	998.0	928.3	810.4	722.9	691.2
40°	951.1	875.0	752.0	662.0	629.0
42.5°	902.9	821.8	693.7	599.8	568.1
45°	852.2	767.2	634.1	544.0	513.6
47.5°	804.0	714.0	577.0	487.0	459.1
50°	750.8	660.7	521.2	433.7	407.1
52.5°	698.8	603.6	468.0	384.3	360.2
55°	648.0	549.1	412.2	336.1	312.0
57.5°	596.0	494.6	362.7	291.7	271.4
60°	542.8	441.3	310.7	246.0	225.7
62.5°	490.8	389.3	266.3	205.4	195.3
65°	437.5	334.8	220.7	177.5	173.7
67.5°	386.8	284.1	177.5	156.0	152.2
70°	333.5	234.6	147.1	134.4	129.4
72.5°	282.8	189.0	123.0	112.9	110.3
75°	233.3	144.6	101.5	92.6	91.3
77.5°	183.9	102.7	79.9	74.8	72.3
80°	138.2	73.6	60.9	55.8	55.8
82.5°	96.4	49.5	41.8	39.3	39.3
85°	54.5	27.9	24.1	24.1	24.1
87.5°	20.3	10.1	10.1	8.9	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)