

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: P987553

Luminaire Tested: S122DR-B865DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987553
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-B865DB2750-4F0-XX-W2A-F_3500K
Description: Define 2 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

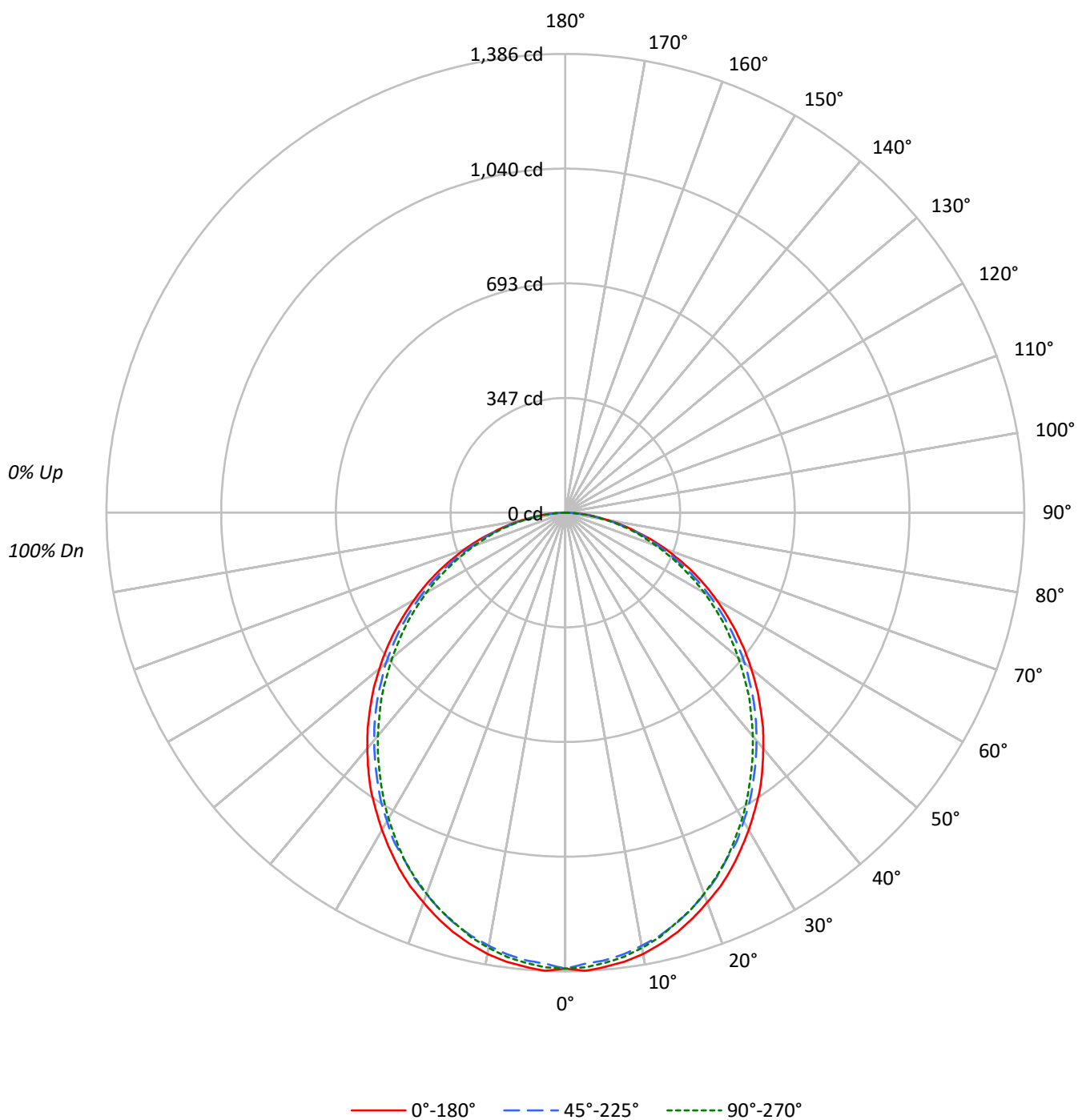
Lumens per Lamp: N/A
Luminaire Lumens: 3505.0 lumens
Efficiency: N/A
Efficacy: 74.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P987553

CATALOG NUMBER: S122DR-B865DB2750-4F0-XX-W2A-F_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P987553

CATALOG NUMBER: S122DR-B865DB2750-4F0-XX-W2A-F_3500K

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°	21808	21808	21808
5°	21891	21575	21701
10°	21760	21357	21463
15°	21491	21079	21057
20°	21109	20664	20640
25°	20730	20152	20152
30°	20241	19685	19516
35°	19788	19121	18841
40°	19215	18558	18203
45°	18652	18001	17555
50°	18039	17420	16800
55°	17400	16743	16122
60°	16690	15937	15348
65°	15926	15132	14439
70°	14958	14162	13486
75°	13608	13045	12721
80°	12078	11714	11112
85°	9862	9390	8427

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18652 cd/sqm

TEST NUMBER: P987553

CATALOG NUMBER: S122DR-B865DB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.7	3.7
10°-20°	364.8	10.4
20°-30°	536.1	15.3
30°-40°	622.7	17.8
40°-50°	621.9	17.7
50°-60°	542.3	15.5
60°-70°	400.8	11.4
70°-80°	226.8	6.5
80°-90°	59.9	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°	1030.6	29.4
0°-40°	1653.3	47.2
0°-60°	2817.5	80.4
0°-90°	3505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3505.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1378	1372	1358	1368	1366	131
15°	1311	1304	1286	1292	1285	369
25°	1187	1176	1154	1156	1154	546
35°	1024	1011	990	982	975	639
45°	833	824	804	790	784	643
55°	630	623	607	591	584	564
65°	425	417	404	392	386	420
75°	222	220	213	205	208	237
85°	54	53	52	48	46	64
90°	0	0	0	0	0	

TEST NUMBER: P987553

CATALOG NUMBER: S122DR-B865DB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1377.7	1377.7	1377.7	1377.7	1377.7
2.5°	1385.6	1379.0	1364.4	1377.7	1375.0
5°	1377.7	1372.4	1357.8	1368.4	1365.7
7.5°	1368.4	1360.4	1345.9	1356.5	1353.8
10°	1353.8	1344.5	1328.7	1339.2	1335.3
12.5°	1334.0	1326.0	1310.1	1316.7	1314.1
15°	1311.4	1303.5	1286.3	1291.6	1284.9
17.5°	1283.6	1275.7	1258.4	1265.1	1258.4
20°	1253.1	1245.2	1226.7	1230.6	1225.3
22.5°	1222.7	1210.8	1193.5	1193.5	1190.9
25°	1186.9	1176.3	1153.8	1156.4	1153.8
27.5°	1147.2	1137.9	1120.7	1116.7	1110.1
30°	1107.4	1096.8	1077.0	1073.0	1067.7
32.5°	1065.0	1057.1	1035.9	1028.0	1022.7
35°	1024.0	1010.7	989.5	981.6	975.0
37.5°	977.6	965.7	944.5	935.2	928.6
40°	929.9	919.3	898.1	886.2	880.9
42.5°	883.6	873.0	851.8	838.5	830.6
45°	833.2	823.9	804.1	789.5	784.2
47.5°	784.2	774.9	753.7	739.2	731.2
50°	732.5	725.9	707.4	688.8	682.2
52.5°	682.2	672.9	655.7	641.1	631.9
55°	630.5	622.6	606.7	590.8	584.2
57.5°	578.9	572.3	555.0	539.1	533.8
60°	527.2	521.9	503.4	488.8	484.8
62.5°	476.9	467.6	454.4	441.1	435.8
65°	425.2	417.3	404.0	392.1	385.5
67.5°	372.2	365.6	353.7	344.4	339.1
70°	323.2	317.9	306.0	296.7	291.4
72.5°	272.9	267.6	261.0	251.7	247.7
75°	222.5	219.9	213.3	205.3	208.0
77.5°	177.5	172.2	169.6	165.6	161.6
80°	132.5	131.1	128.5	124.5	121.9
82.5°	90.1	90.1	88.8	83.5	83.5
85°	54.3	53.0	51.7	47.7	46.4
87.5°	23.8	21.2	18.5	14.6	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)