

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: P1004538

Luminaire Tested: S125DR-B1090DB30-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DR-B1090DB30-4F0-XX-W2A-D
Description: Define 5 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

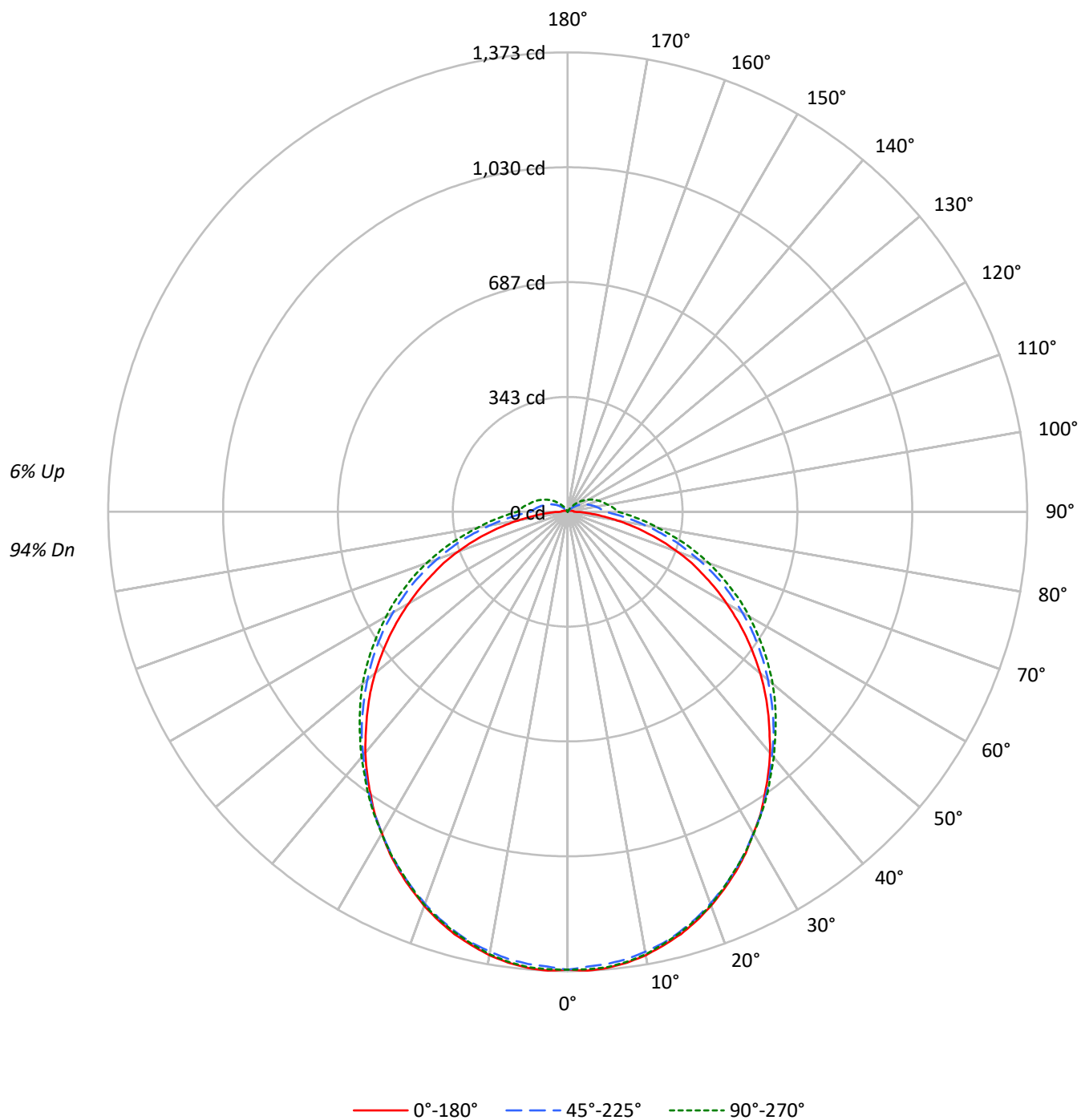
Lumens per Lamp: N/A
Luminaire Lumens: 4240.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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: P1004538

CATALOG NUMBER: S125DR-B1090DB30-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1004538

CATALOG NUMBER: S125DR-B1090DB30-4F0-XX-W2A-D

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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8769	8769	8769
5°	8803	8725	8786
10°	8756	8687	8739
15°	8669	8616	8634
20°	8545	8500	8527
25°	8396	8367	8357
30°	8210	8210	8220
35°	8040	8081	8113
40°	7867	7946	8013
45°	7672	7867	7964
50°	7490	7785	7972
55°	7270	7749	7975
60°	7032	7721	8031
65°	6795	7752	8137
70°	6536	7767	8396
75°	6112	8038	8870
80°	5594	8763	10051
85°	5425	12130	15092

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 25823 cd/sqm

TEST NUMBER: P1004538

CATALOG NUMBER: S125DR-B1090DB30-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.5	3.1
10°-20°	367.7	8.7
20°-30°	546.7	12.9
30°-40°	647.5	15.3
40°-50°	669.4	15.8
50°-60°	616.7	14.5
60°-70°	498.5	11.8
70°-80°	333.6	7.9
80°-90°	172.4	4.1
90°-100°	97.1	2.3
100°-110°	71.6	1.7
110°-120°	47.9	1.1
120°-130°	27.1	0.6
130°-140°	11.9	0.3
140°-150°	2.3	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1043.9	24.6
0°-40°	1691.5	39.9
0°-60°	2977.5	70.2
0°-90°	3982.0	93.9
90°-120°	216.6	5.1
90°-150°	258.0	6.1
90°-180°	258.0	6.1
0°-180°	4240.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1369	1369	1369	1369	1369	
5°	1369	1366	1357	1367	1366	130
15°	1307	1308	1299	1307	1302	368
25°	1188	1192	1184	1189	1182	547
35°	1028	1037	1033	1037	1037	643
45°	847	862	868	878	879	653
55°	651	672	694	708	714	582
65°	448	479	511	531	537	445
75°	247	282	325	352	358	262
85°	74	118	165	195	205	77
90°	22	64	110	141	150	15
95°	17	52	98	128	137	14
105°	12	34	74	101	110	13
115°	8	17	52	76	84	8
125°	5	4	31	52	59	5
135°	3	1	11	28	35	2
145°	1	0	0	7	12	1
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: P1004538

CATALOG NUMBER: S125DR-B1090DB30-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1368.7	1368.7	1368.7	1368.7	1368.7
2.5°	1372.7	1370.0	1360.7	1370.0	1368.7
5°	1368.7	1366.0	1356.6	1367.4	1366.0
7.5°	1359.3	1358.0	1348.6	1358.0	1356.6
10°	1345.9	1345.9	1335.2	1344.5	1343.2
12.5°	1327.1	1328.4	1320.4	1327.1	1323.1
15°	1307.0	1308.3	1298.9	1307.0	1301.6
17.5°	1281.5	1284.2	1274.8	1281.5	1277.5
20°	1253.3	1256.0	1246.6	1250.6	1250.6
22.5°	1221.1	1226.5	1215.7	1221.1	1217.1
25°	1187.6	1191.6	1183.5	1188.9	1182.2
27.5°	1151.3	1156.7	1147.3	1151.3	1148.6
30°	1109.7	1117.8	1109.7	1112.4	1111.1
32.5°	1072.2	1078.9	1073.5	1076.2	1074.8
35°	1027.9	1037.3	1033.2	1037.3	1037.3
37.5°	984.9	993.0	991.6	997.0	995.7
40°	940.6	951.4	950.0	955.4	958.1
42.5°	892.3	907.1	911.1	917.8	917.8
45°	846.7	861.5	868.2	877.6	878.9
47.5°	799.8	813.2	823.9	837.3	840.0
50°	751.4	766.2	781.0	795.7	799.8
52.5°	700.5	719.2	738.0	754.1	756.8
55°	650.8	672.3	693.7	708.5	713.9
57.5°	599.8	625.3	649.5	665.6	669.6
60°	548.8	575.7	602.5	622.6	626.7
62.5°	499.2	526.0	555.5	578.3	583.7
65°	448.2	479.0	511.3	531.4	536.7
67.5°	401.2	430.7	462.9	487.1	493.8
70°	348.9	379.7	414.6	440.1	448.2
72.5°	297.9	330.1	369.0	397.2	402.6
75°	246.9	281.8	324.7	351.6	358.3
77.5°	197.3	237.5	277.8	307.3	312.7
80°	151.6	191.9	237.5	267.0	272.4
82.5°	110.0	153.0	199.9	228.1	238.9
85°	73.8	118.1	165.0	194.6	205.3
87.5°	47.0	89.9	135.5	166.4	175.8
90°	21.5	64.4	110.0	140.9	150.3
92.5°	18.8	57.7	104.7	134.2	143.6
95°	17.4	52.3	98.0	127.5	136.9
97.5°	16.1	48.3	92.6	120.8	130.2
100°	14.8	42.9	85.9	114.1	122.1
102.5°	13.4	38.9	80.5	107.3	115.4
105°	12.1	33.5	73.8	100.6	110.0
107.5°	10.7	29.5	68.4	95.3	103.3
110°	9.4	25.5	63.1	88.6	98.0



TEST NUMBER: P1004538

CATALOG NUMBER: S125DR-B1090DB30-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.4	21.5	57.7	81.9	91.2
115°	8.1	17.4	52.3	76.5	84.5
117.5°	6.7	13.4	47.0	69.8	79.2
120°	6.7	10.7	41.6	64.4	72.5
122.5°	5.4	6.7	36.2	57.7	65.8
125°	5.4	4.0	30.9	52.3	59.0
127.5°	4.0	2.7	25.5	45.6	53.7
130°	4.0	2.7	21.5	40.3	47.0
132.5°	2.7	2.7	16.1	34.9	40.3
135°	2.7	1.3	10.7	28.2	34.9
137.5°	2.7	1.3	6.7	22.8	28.2
140°	1.3	1.3	2.7	17.4	22.8
142.5°	1.3	0.0	0.0	12.1	17.4
145°	1.3	0.0	0.0	6.7	12.1
147.5°	0.0	0.0	0.0	2.7	5.4
150°	0.0	0.0	0.0	0.0	1.3
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)