

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: P1004547

Luminaire Tested: S125DR-B1090DB50-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004547
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-B1090DB50-4F0-XX-W2A-D
Description: Define 5 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

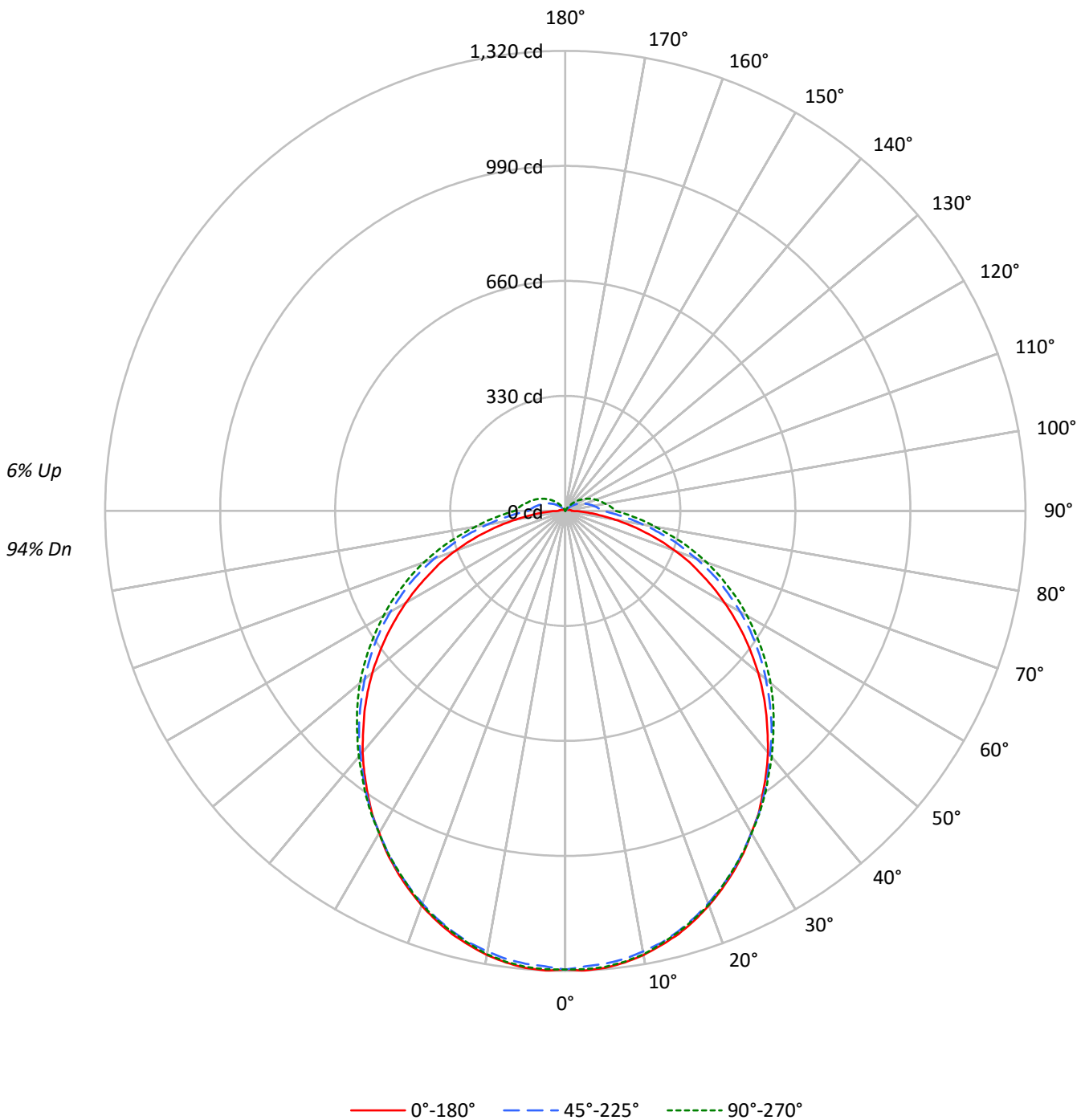
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4077.0 lumens
Efficiency: N/A
Efficacy: 87.1 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

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Luminous Intensity Polar Plot





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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	50	30	10	0
RCR																					
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	79	79	79	76
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	65	65	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	55	55	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	47	47	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	41	41	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	36	36	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	32	32	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	29	29	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	26	26	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	23	23	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8432	8432	8432
5°	8465	8390	8448
10°	8419	8352	8403
15°	8336	8285	8302
20°	8217	8173	8199
25°	8073	8045	8036
30°	7895	7895	7904
35°	7731	7771	7801
40°	7565	7640	7706
45°	7377	7564	7657
50°	7203	7485	7665
55°	6990	7452	7667
60°	6762	7423	7722
65°	6534	7453	7824
70°	6285	7469	8074
75°	5877	7729	8528
80°	5380	8427	9663
85°	5219	11667	14511

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 24824 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	3.1
10°-20°	353.5	8.7
20°-30°	525.7	12.9
30°-40°	622.6	15.3
40°-50°	643.7	15.8
50°-60°	593.0	14.5
60°-70°	479.3	11.8
70°-80°	320.7	7.9
80°-90°	165.8	4.1
90°-100°	93.4	2.3
100°-110°	68.8	1.7
110°-120°	46.1	1.1
120°-130°	26.1	0.6
130°-140°	11.4	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°	1003.8	24.6
0°-40°	1626.4	39.9
0°-60°	2863.1	70.2
0°-90°	3828.9	93.9
90°-120°	208.3	5.1
90°-150°	248.1	6.1
90°-180°	248.0	6.1
0°-180°	4077.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1316	1316	1316	1316	1316	
5°	1316	1314	1304	1315	1314	125
15°	1257	1258	1249	1257	1252	354
25°	1142	1146	1138	1143	1137	526
35°	988	997	994	997	997	619
45°	814	828	835	844	845	628
55°	626	646	667	681	686	559
65°	431	461	492	511	516	428
75°	237	271	312	338	344	252
85°	71	114	159	187	197	74
90°	21	62	106	136	144	14
95°	17	50	94	123	132	13
105°	12	32	71	97	106	12
115°	8	17	50	74	81	8
125°	5	4	30	50	57	4
135°	3	1	10	27	34	2
145°	1	0	0	6	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: P1004547
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1316.1	1316.1	1316.1	1316.1	1316.1
2.5°	1320.0	1317.4	1308.3	1317.4	1316.1
5°	1316.1	1313.5	1304.5	1314.8	1313.5
7.5°	1307.1	1305.8	1296.7	1305.8	1304.5
10°	1294.1	1294.1	1283.8	1292.9	1291.6
12.5°	1276.1	1277.4	1269.6	1276.1	1272.2
15°	1256.7	1258.0	1249.0	1256.7	1251.6
17.5°	1232.2	1234.8	1225.8	1232.2	1228.3
20°	1205.1	1207.7	1198.7	1202.5	1202.5
22.5°	1174.2	1179.3	1169.0	1174.2	1170.3
25°	1141.9	1145.8	1138.0	1143.2	1136.7
27.5°	1107.1	1112.2	1103.2	1107.1	1104.5
30°	1067.1	1074.8	1067.1	1069.6	1068.4
32.5°	1030.9	1037.4	1032.2	1034.8	1033.5
35°	988.4	997.4	993.5	997.4	997.4
37.5°	947.1	954.8	953.5	958.7	957.4
40°	904.5	914.8	913.5	918.7	921.3
42.5°	858.0	872.2	876.1	882.6	882.6
45°	814.2	828.4	834.8	843.8	845.1
47.5°	769.0	781.9	792.2	805.1	807.7
50°	722.6	736.7	750.9	765.1	769.0
52.5°	673.5	691.6	709.7	725.1	727.7
55°	625.8	646.4	667.1	681.3	686.4
57.5°	576.8	601.3	624.5	640.0	643.8
60°	527.7	553.5	579.3	598.7	602.6
62.5°	480.0	505.8	534.2	556.1	561.3
65°	431.0	460.6	491.6	511.0	516.1
67.5°	385.8	414.2	445.1	468.4	474.8
70°	335.5	365.1	398.7	423.2	431.0
72.5°	286.4	317.4	354.8	381.9	387.1
75°	237.4	271.0	312.2	338.1	344.5
77.5°	189.7	228.4	267.1	295.5	300.6
80°	145.8	184.5	228.4	256.8	261.9
82.5°	105.8	147.1	192.3	219.3	229.7
85°	71.0	113.5	158.7	187.1	197.4
87.5°	45.2	86.4	130.3	160.0	169.0
90°	20.6	61.9	105.8	135.5	144.5
92.5°	18.1	55.5	100.6	129.0	138.1
95°	16.8	50.3	94.2	122.6	131.6
97.5°	15.5	46.5	89.0	116.1	125.2
100°	14.2	41.3	82.6	109.7	117.4
102.5°	12.9	37.4	77.4	103.2	111.0
105°	11.6	32.3	71.0	96.8	105.8
107.5°	10.3	28.4	65.8	91.6	99.4
110°	9.0	24.5	60.6	85.2	94.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.0	20.6	55.5	78.7	87.7
115°	7.7	16.8	50.3	73.5	81.3
117.5°	6.5	12.9	45.2	67.1	76.1
120°	6.5	10.3	40.0	61.9	69.7
122.5°	5.2	6.5	34.8	55.5	63.2
125°	5.2	3.9	29.7	50.3	56.8
127.5°	3.9	2.6	24.5	43.9	51.6
130°	3.9	2.6	20.6	38.7	45.2
132.5°	2.6	2.6	15.5	33.5	38.7
135°	2.6	1.3	10.3	27.1	33.5
137.5°	2.6	1.3	6.5	21.9	27.1
140°	1.3	1.3	2.6	16.8	21.9
142.5°	1.3	0.0	0.0	11.6	16.8
145°	1.3	0.0	0.0	6.5	11.6
147.5°	0.0	0.0	0.0	2.6	5.2
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)