

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: P1004544

Luminaire Tested: S125DR-B1090DB40-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004544
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-B1090DB40-4F0-XX-W2A-D
Description: Define 5 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

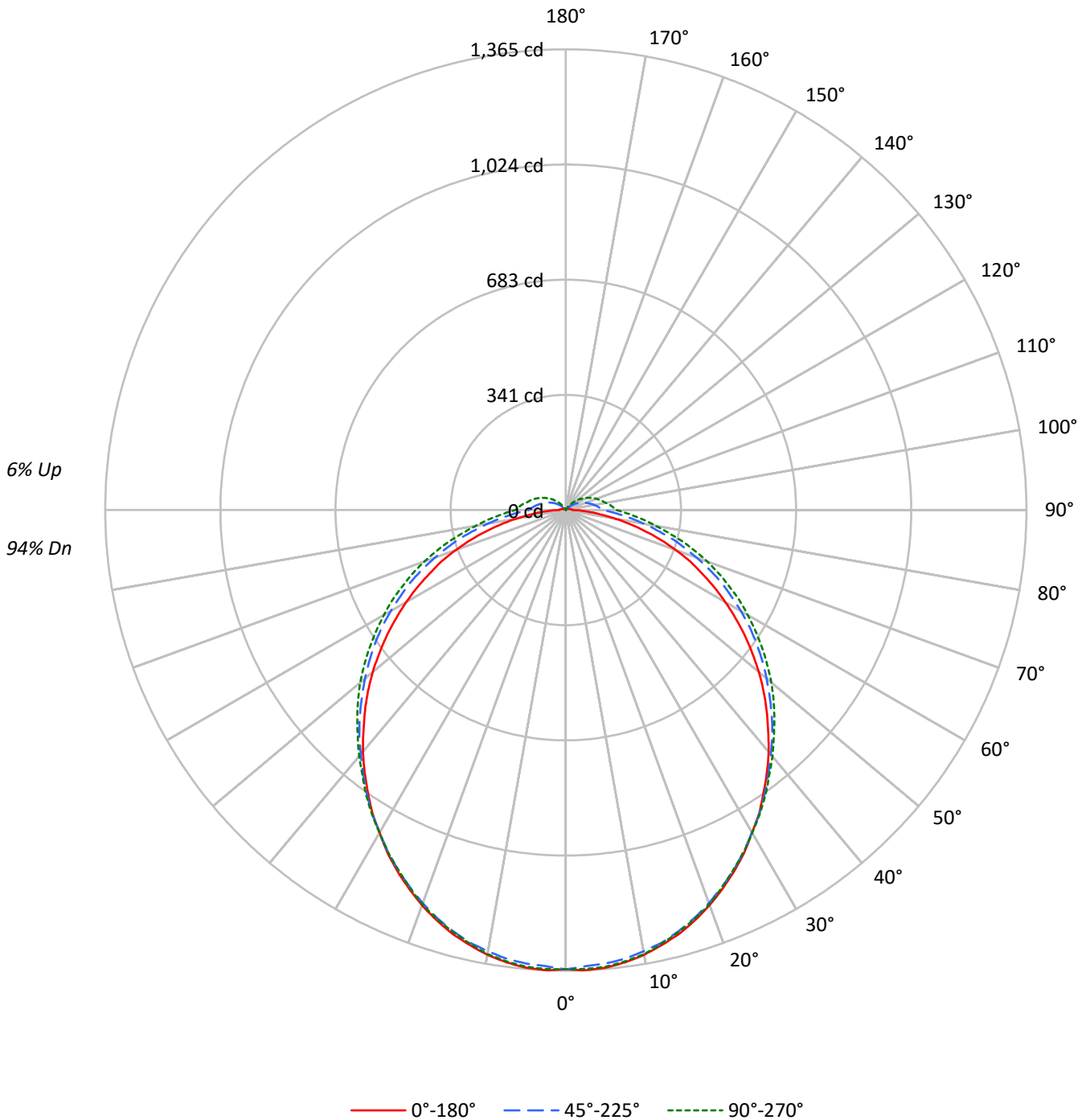
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4216.0 lumens
Efficiency: N/A
Efficacy: 90.1 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 (A_{in}): 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	83	81	79	76
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	64	59	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	57	51	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	39	33	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	33	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8720	8720	8720
5°	8753	8676	8736
10°	8707	8637	8689
15°	8620	8567	8585
20°	8497	8451	8479
25°	8348	8319	8310
30°	8163	8163	8174
35°	7994	8036	8067
40°	7823	7901	7968
45°	7628	7822	7918
50°	7448	7740	7926
55°	7228	7705	7929
60°	6993	7677	7985
65°	6756	7708	8091
70°	6499	7724	8347
75°	6077	7993	8818
80°	5564	8715	9995
85°	5396	12064	15004

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 25676 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.8	3.1
10°-20°	365.6	8.7
20°-30°	543.6	12.9
30°-40°	643.8	15.3
40°-50°	665.6	15.8
50°-60°	613.2	14.5
60°-70°	495.7	11.8
70°-80°	331.7	7.9
80°-90°	171.4	4.1
90°-100°	96.6	2.3
100°-110°	71.2	1.7
110°-120°	47.7	1.1
120°-130°	27.0	0.6
130°-140°	11.8	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°	1038.0	24.6
0°-40°	1681.9	39.9
0°-60°	2960.7	70.2
0°-90°	3959.4	93.9
90°-120°	215.4	5.1
90°-150°	256.5	6.1
90°-180°	257.0	6.1
0°-180°	4216.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1361	1361	1361	1361	1361	
5°	1361	1358	1349	1360	1358	129
15°	1300	1301	1292	1300	1294	366
25°	1181	1185	1177	1182	1176	544
35°	1022	1031	1027	1031	1031	640
45°	842	857	863	873	874	650
55°	647	668	690	704	710	578
65°	446	476	508	528	534	442
75°	246	280	323	350	356	260
85°	73	117	164	194	204	77
90°	21	64	109	140	149	15
95°	17	52	97	127	136	14
105°	12	33	73	100	109	13
115°	8	17	52	76	84	8
125°	5	4	31	52	59	4
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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1361.0	1361.0	1361.0	1361.0	1361.0
2.5°	1365.0	1362.3	1352.9	1362.3	1361.0
5°	1361.0	1358.3	1348.9	1359.6	1358.3
7.5°	1351.6	1350.3	1340.9	1350.3	1348.9
10°	1338.3	1338.3	1327.6	1336.9	1335.6
12.5°	1319.6	1320.9	1312.9	1319.6	1315.6
15°	1299.6	1300.9	1291.6	1299.6	1294.2
17.5°	1274.2	1276.9	1267.6	1274.2	1270.2
20°	1246.2	1248.9	1239.5	1243.5	1243.5
22.5°	1214.2	1219.5	1208.8	1214.2	1210.2
25°	1180.8	1184.8	1176.8	1182.2	1175.5
27.5°	1144.8	1150.1	1140.8	1144.8	1142.1
30°	1103.4	1111.4	1103.4	1106.1	1104.8
32.5°	1066.1	1072.8	1067.4	1070.1	1068.7
35°	1022.1	1031.4	1027.4	1031.4	1031.4
37.5°	979.4	987.4	986.0	991.4	990.0
40°	935.3	946.0	944.7	950.0	952.7
42.5°	887.3	902.0	906.0	912.6	912.6
45°	841.9	856.6	863.3	872.6	873.9
47.5°	795.2	808.6	819.2	832.6	835.3
50°	747.2	761.9	776.5	791.2	795.2
52.5°	696.5	715.2	733.8	749.9	752.5
55°	647.1	668.5	689.8	704.5	709.8
57.5°	596.4	621.8	645.8	661.8	665.8
60°	545.7	572.4	599.1	619.1	623.1
62.5°	496.3	523.0	552.4	575.1	580.4
65°	445.6	476.3	508.4	528.4	533.7
67.5°	398.9	428.3	460.3	484.3	491.0
70°	346.9	377.6	412.3	437.6	445.6
72.5°	296.2	328.2	366.9	394.9	400.3
75°	245.5	280.2	322.9	349.6	356.2
77.5°	196.1	236.2	276.2	305.5	310.9
80°	150.8	190.8	236.2	265.5	270.9
82.5°	109.4	152.1	198.8	226.8	237.5
85°	73.4	117.4	164.1	193.5	204.1
87.5°	46.7	89.4	134.8	165.4	174.8
90°	21.3	64.0	109.4	140.1	149.4
92.5°	18.7	57.4	104.1	133.4	142.8
95°	17.3	52.0	97.4	126.8	136.1
97.5°	16.0	48.0	92.1	120.1	129.4
100°	14.7	42.7	85.4	113.4	121.4
102.5°	13.3	38.7	80.1	106.7	114.7
105°	12.0	33.4	73.4	100.1	109.4
107.5°	10.7	29.4	68.0	94.7	102.7
110°	9.3	25.4	62.7	88.1	97.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.3	21.3	57.4	81.4	90.7
115°	8.0	17.3	52.0	76.1	84.1
117.5°	6.7	13.3	46.7	69.4	78.7
120°	6.7	10.7	41.4	64.0	72.1
122.5°	5.3	6.7	36.0	57.4	65.4
125°	5.3	4.0	30.7	52.0	58.7
127.5°	4.0	2.7	25.4	45.4	53.4
130°	4.0	2.7	21.3	40.0	46.7
132.5°	2.7	2.7	16.0	34.7	40.0
135°	2.7	1.3	10.7	28.0	34.7
137.5°	2.7	1.3	6.7	22.7	28.0
140°	1.3	1.3	2.7	17.3	22.7
142.5°	1.3	0.0	0.0	12.0	17.3
145°	1.3	0.0	0.0	6.7	12.0
147.5°	0.0	0.0	0.0	2.7	5.3
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)