

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: P1004529

Luminaire Tested: S125DR-B1090DB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004529
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-B1090DB2750-4F0-XX-W2A-D_3500K
Description: Define 5 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

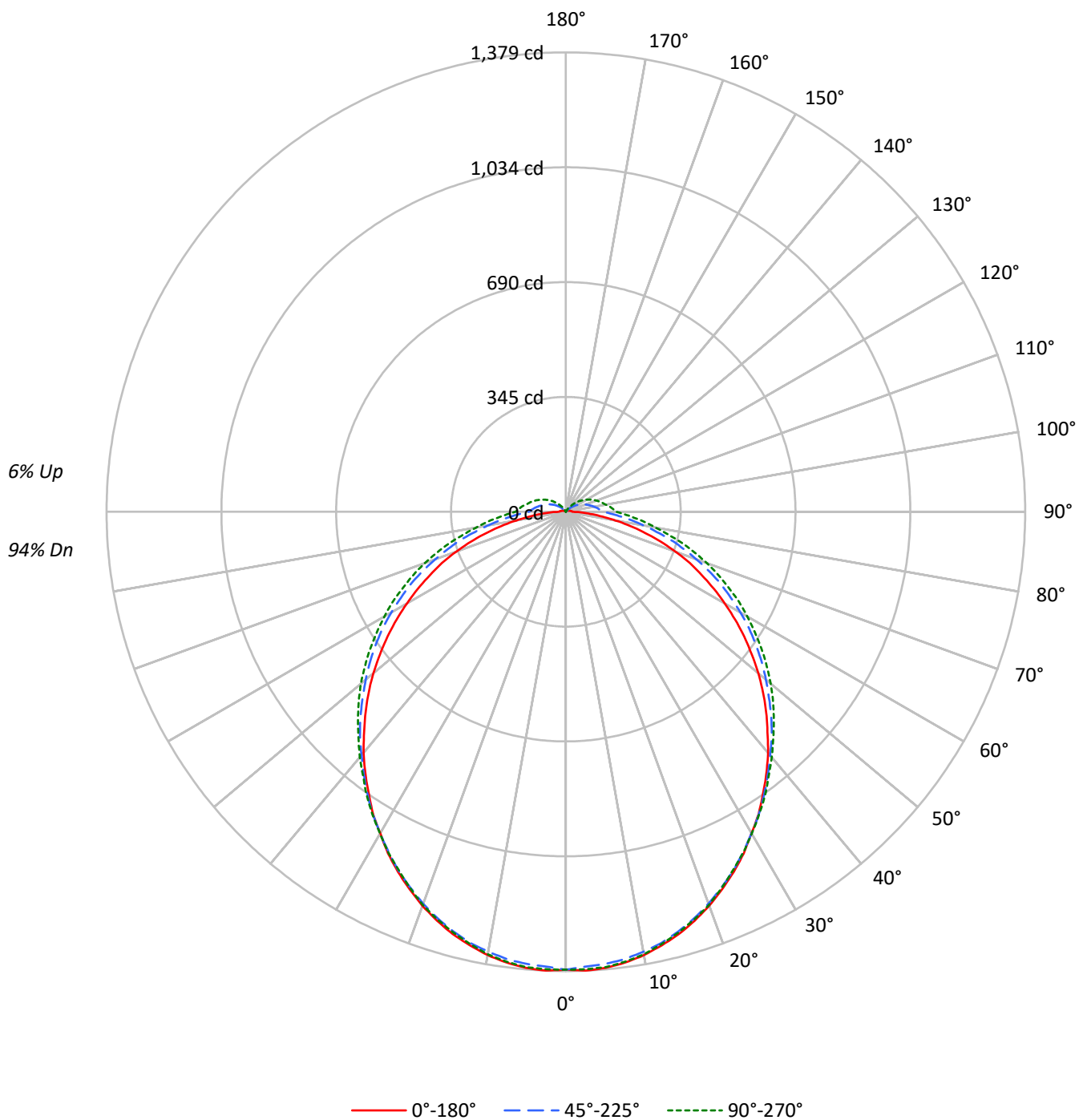
Lumens per Lamp: N/A
Luminaire Lumens: 4258.0 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8807	8807	8807
5°	8840	8762	8823
10°	8793	8723	8776
15°	8706	8652	8670
20°	8581	8536	8563
25°	8431	8402	8393
30°	8245	8245	8255
35°	8073	8116	8148
40°	7901	7980	8048
45°	7705	7900	7998
50°	7522	7818	8005
55°	7301	7782	8008
60°	7063	7754	8064
65°	6824	7783	8171
70°	6564	7800	8432
75°	6139	8073	8907
80°	5619	8800	10095
85°	5447	12188	15158

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 25925 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.1	3.1
10°-20°	369.2	8.7
20°-30°	549.1	12.9
30°-40°	650.3	15.3
40°-50°	672.3	15.8
50°-60°	619.3	14.5
60°-70°	500.6	11.8
70°-80°	335.0	7.9
80°-90°	173.2	4.1
90°-100°	97.5	2.3
100°-110°	71.9	1.7
110°-120°	48.1	1.1
120°-130°	27.2	0.6
130°-140°	11.9	0.3
140°-150°	2.4	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1048.4	24.6
0°-40°	1698.6	39.9
0°-60°	2990.2	70.2
0°-90°	3998.9	93.9
90°-120°	217.6	5.1
90°-150°	259.1	6.1
90°-180°	259.0	6.1
0°-180°	4258.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1374	1374	1374	1374	1374	
5°	1374	1372	1362	1373	1372	130
15°	1312	1314	1304	1312	1307	370
25°	1193	1197	1188	1194	1187	549
35°	1032	1042	1038	1042	1042	646
45°	850	865	872	881	883	656
55°	654	675	697	712	717	584
65°	450	481	513	534	539	447
75°	248	283	326	353	360	263
85°	74	119	166	195	206	77
90°	22	65	110	142	151	15
95°	18	53	98	128	138	14
105°	12	34	74	101	110	13
115°	8	18	53	77	85	8
125°	5	4	31	53	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

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1374.5	1374.5	1374.5	1374.5	1374.5
2.5°	1378.6	1375.9	1366.4	1375.9	1374.5
5°	1374.5	1371.8	1362.4	1373.2	1371.8
7.5°	1365.1	1363.7	1354.3	1363.7	1362.4
10°	1351.6	1351.6	1340.8	1350.3	1348.9
12.5°	1332.7	1334.1	1326.0	1332.7	1328.7
15°	1312.5	1313.9	1304.4	1312.5	1307.1
17.5°	1286.9	1289.6	1280.2	1286.9	1282.9
20°	1258.6	1261.3	1251.9	1255.9	1255.9
22.5°	1226.3	1231.7	1220.9	1226.3	1222.2
25°	1192.6	1196.6	1188.5	1193.9	1187.2
27.5°	1156.2	1161.6	1152.2	1156.2	1153.5
30°	1114.4	1122.5	1114.4	1117.1	1115.8
32.5°	1076.7	1083.4	1078.0	1080.7	1079.4
35°	1032.2	1041.7	1037.6	1041.7	1041.7
37.5°	989.1	997.2	995.8	1001.2	999.9
40°	944.6	955.4	954.1	959.5	962.2
42.5°	896.1	911.0	915.0	921.7	921.7
45°	850.3	865.1	871.9	881.3	882.7
47.5°	803.1	816.6	827.4	840.9	843.6
50°	754.6	769.5	784.3	799.1	803.1
52.5°	703.4	722.3	741.2	757.3	760.0
55°	653.6	675.1	696.7	711.5	716.9
57.5°	602.4	628.0	652.2	668.4	672.4
60°	551.2	578.1	605.1	625.3	629.3
62.5°	501.3	528.2	557.9	580.8	586.2
65°	450.1	481.1	513.4	533.6	539.0
67.5°	402.9	432.6	464.9	489.2	495.9
70°	350.4	381.4	416.4	442.0	450.1
72.5°	299.2	331.5	370.6	398.9	404.3
75°	248.0	283.0	326.1	353.1	359.8
77.5°	198.1	238.5	278.9	308.6	314.0
80°	152.3	192.7	238.5	268.2	273.6
82.5°	110.5	153.6	200.8	229.1	239.9
85°	74.1	118.6	165.8	195.4	206.2
87.5°	47.2	90.3	136.1	167.1	176.5
90°	21.6	64.7	110.5	141.5	150.9
92.5°	18.9	57.9	105.1	134.8	144.2
95°	17.5	52.6	98.4	128.0	137.5
97.5°	16.2	48.5	93.0	121.3	130.7
100°	14.8	43.1	86.2	114.5	122.6
102.5°	13.5	39.1	80.9	107.8	115.9
105°	12.1	33.7	74.1	101.1	110.5
107.5°	10.8	29.6	68.7	95.7	103.8
110°	9.4	25.6	63.3	88.9	98.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.4	21.6	57.9	82.2	91.6
115°	8.1	17.5	52.6	76.8	84.9
117.5°	6.7	13.5	47.2	70.1	79.5
120°	6.7	10.8	41.8	64.7	72.8
122.5°	5.4	6.7	36.4	57.9	66.0
125°	5.4	4.0	31.0	52.6	59.3
127.5°	4.0	2.7	25.6	45.8	53.9
130°	4.0	2.7	21.6	40.4	47.2
132.5°	2.7	2.7	16.2	35.0	40.4
135°	2.7	1.3	10.8	28.3	35.0
137.5°	2.7	1.3	6.7	22.9	28.3
140°	1.3	1.3	2.7	17.5	22.9
142.5°	1.3	0.0	0.0	12.1	17.5
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)