

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: P1037930

Luminaire Tested: S125DS-B1090DB27-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037930
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: S125DS-B1090DB27-4F0-XX-W2A-D
Description: Define 5 Direct Surface with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

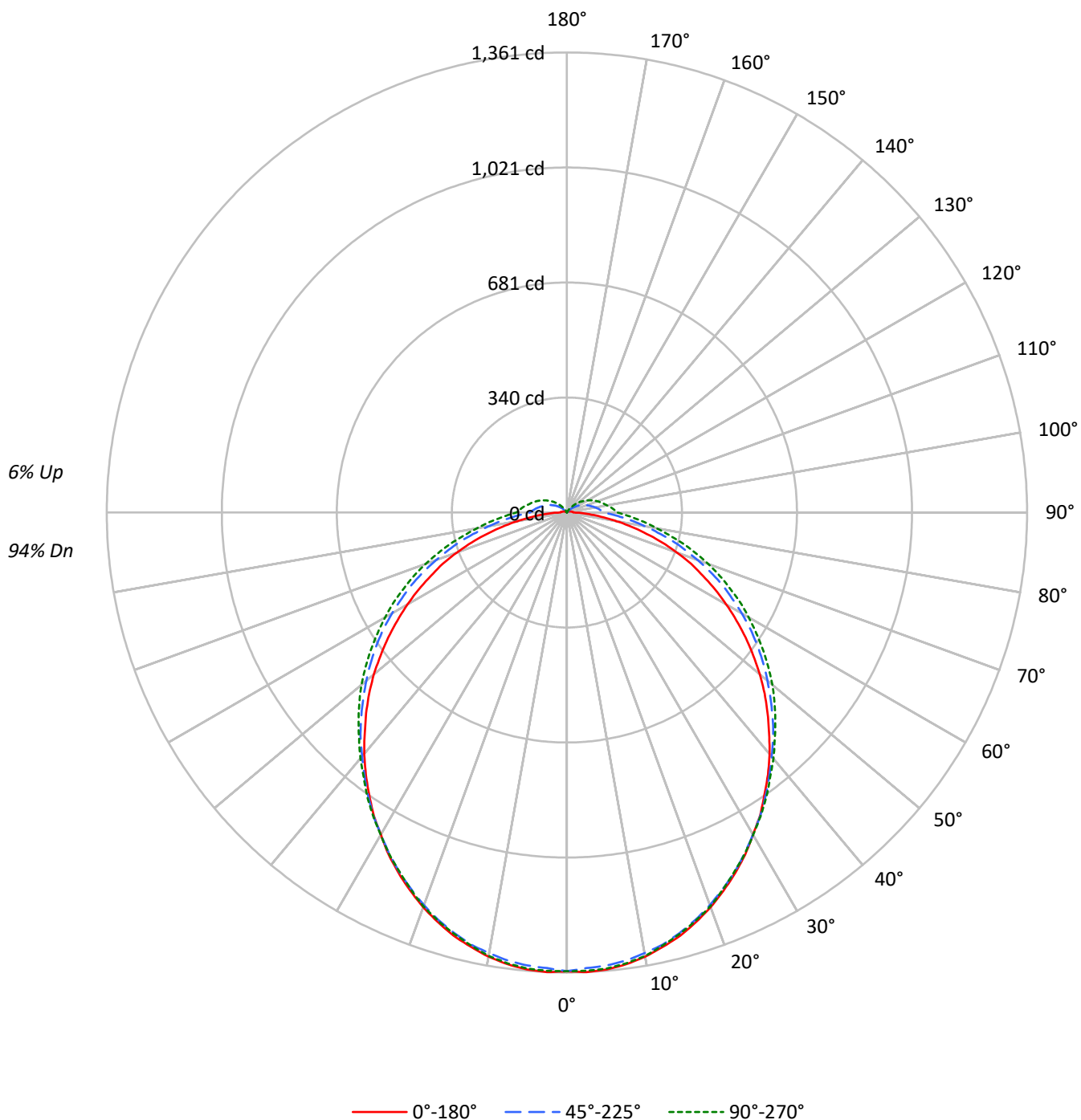
Lumens per Lamp: N/A
Luminaire Lumens: 4204.0 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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
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°	8695	8695	8695
5°	8728	8651	8711
10°	8682	8613	8665
15°	8596	8543	8561
20°	8473	8427	8455
25°	8324	8296	8286
30°	8140	8140	8150
35°	7971	8013	8045
40°	7801	7879	7946
45°	7607	7800	7897
50°	7427	7718	7904
55°	7208	7684	7906
60°	6973	7655	7961
65°	6737	7685	8068
70°	6480	7701	8325
75°	6060	7971	8793
80°	5546	8689	9966
85°	5381	12027	14967

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 25602 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.4	3.1
10°-20°	364.6	8.7
20°-30°	542.1	12.9
30°-40°	642.0	15.3
40°-50°	663.7	15.8
50°-60°	611.4	14.5
60°-70°	494.3	11.8
70°-80°	330.7	7.9
80°-90°	170.9	4.1
90°-100°	96.3	2.3
100°-110°	71.0	1.7
110°-120°	47.5	1.1
120°-130°	26.9	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°	1035.1	24.6
0°-40°	1677.1	39.9
0°-60°	2952.3	70.2
0°-90°	3948.2	93.9
90°-120°	214.8	5.1
90°-150°	255.8	6.1
90°-180°	256.0	6.1
0°-180°	4204.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1357	1357	1357	1357	1357	
5°	1357	1354	1345	1356	1354	129
15°	1296	1297	1288	1296	1291	365
25°	1178	1182	1174	1179	1172	542
35°	1019	1028	1024	1028	1028	638
45°	840	854	861	870	872	648
55°	645	667	688	702	708	577
65°	444	475	507	527	532	441
75°	245	279	322	349	355	259
85°	73	117	164	193	204	76
90°	21	64	109	140	149	15
95°	17	52	97	126	136	14
105°	12	33	73	100	109	13
115°	8	17	52	76	84	8
125°	5	4	31	52	58	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°	1357.1	1357.1	1357.1	1357.1	1357.1
2.5°	1361.1	1358.4	1349.1	1358.4	1357.1
5°	1357.1	1354.4	1345.1	1355.8	1354.4
7.5°	1347.8	1346.4	1337.1	1346.4	1345.1
10°	1334.5	1334.5	1323.8	1333.1	1331.8
12.5°	1315.8	1317.2	1309.2	1315.8	1311.8
15°	1295.9	1297.2	1287.9	1295.9	1290.6
17.5°	1270.6	1273.3	1263.9	1270.6	1266.6
20°	1242.7	1245.3	1236.0	1240.0	1240.0
22.5°	1210.7	1216.1	1205.4	1210.7	1206.7
25°	1177.5	1181.5	1173.5	1178.8	1172.1
27.5°	1141.5	1146.9	1137.6	1141.5	1138.9
30°	1100.3	1108.3	1100.3	1103.0	1101.6
32.5°	1063.0	1069.7	1064.4	1067.0	1065.7
35°	1019.1	1028.5	1024.5	1028.5	1028.5
37.5°	976.6	984.5	983.2	988.5	987.2
40°	932.7	943.3	942.0	947.3	950.0
42.5°	884.8	899.4	903.4	910.0	910.0
45°	839.5	854.2	860.8	870.1	871.5
47.5°	793.0	806.3	816.9	830.2	832.9
50°	745.1	759.7	774.3	789.0	793.0
52.5°	694.5	713.1	731.8	747.7	750.4
55°	645.3	666.6	687.9	702.5	707.8
57.5°	594.7	620.0	643.9	659.9	663.9
60°	544.2	570.8	597.4	617.3	621.3
62.5°	494.9	521.5	550.8	573.4	578.8
65°	444.4	475.0	506.9	526.9	532.2
67.5°	397.8	427.1	459.0	483.0	489.6
70°	345.9	376.5	411.1	436.4	444.4
72.5°	295.4	327.3	365.9	393.8	399.1
75°	244.8	279.4	322.0	348.6	355.2
77.5°	195.6	235.5	275.4	304.7	310.0
80°	150.3	190.3	235.5	264.8	270.1
82.5°	109.1	151.7	198.2	226.2	236.8
85°	73.2	117.1	163.6	192.9	203.6
87.5°	46.6	89.1	134.4	165.0	174.3
90°	21.3	63.9	109.1	139.7	149.0
92.5°	18.6	57.2	103.8	133.0	142.4
95°	17.3	51.9	97.1	126.4	135.7
97.5°	16.0	47.9	91.8	119.7	129.1
100°	14.6	42.6	85.2	113.1	121.1
102.5°	13.3	38.6	79.8	106.4	114.4
105°	12.0	33.3	73.2	99.8	109.1
107.5°	10.6	29.3	67.9	94.5	102.4
110°	9.3	25.3	62.5	87.8	97.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.3	21.3	57.2	81.2	90.5
115°	8.0	17.3	51.9	75.8	83.8
117.5°	6.7	13.3	46.6	69.2	78.5
120°	6.7	10.6	41.2	63.9	71.8
122.5°	5.3	6.7	35.9	57.2	65.2
125°	5.3	4.0	30.6	51.9	58.5
127.5°	4.0	2.7	25.3	45.2	53.2
130°	4.0	2.7	21.3	39.9	46.6
132.5°	2.7	2.7	16.0	34.6	39.9
135°	2.7	1.3	10.6	27.9	34.6
137.5°	2.7	1.3	6.7	22.6	27.9
140°	1.3	1.3	2.7	17.3	22.6
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)