

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: P1028556

Luminaire Tested: S125RDIP-B1090D850UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1028556
REPORT IS A COMBINATION OF REPORTS P1005111 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDIP-B1090D850UB40-4F0-XX-W2A-F1
Description: Define 5 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

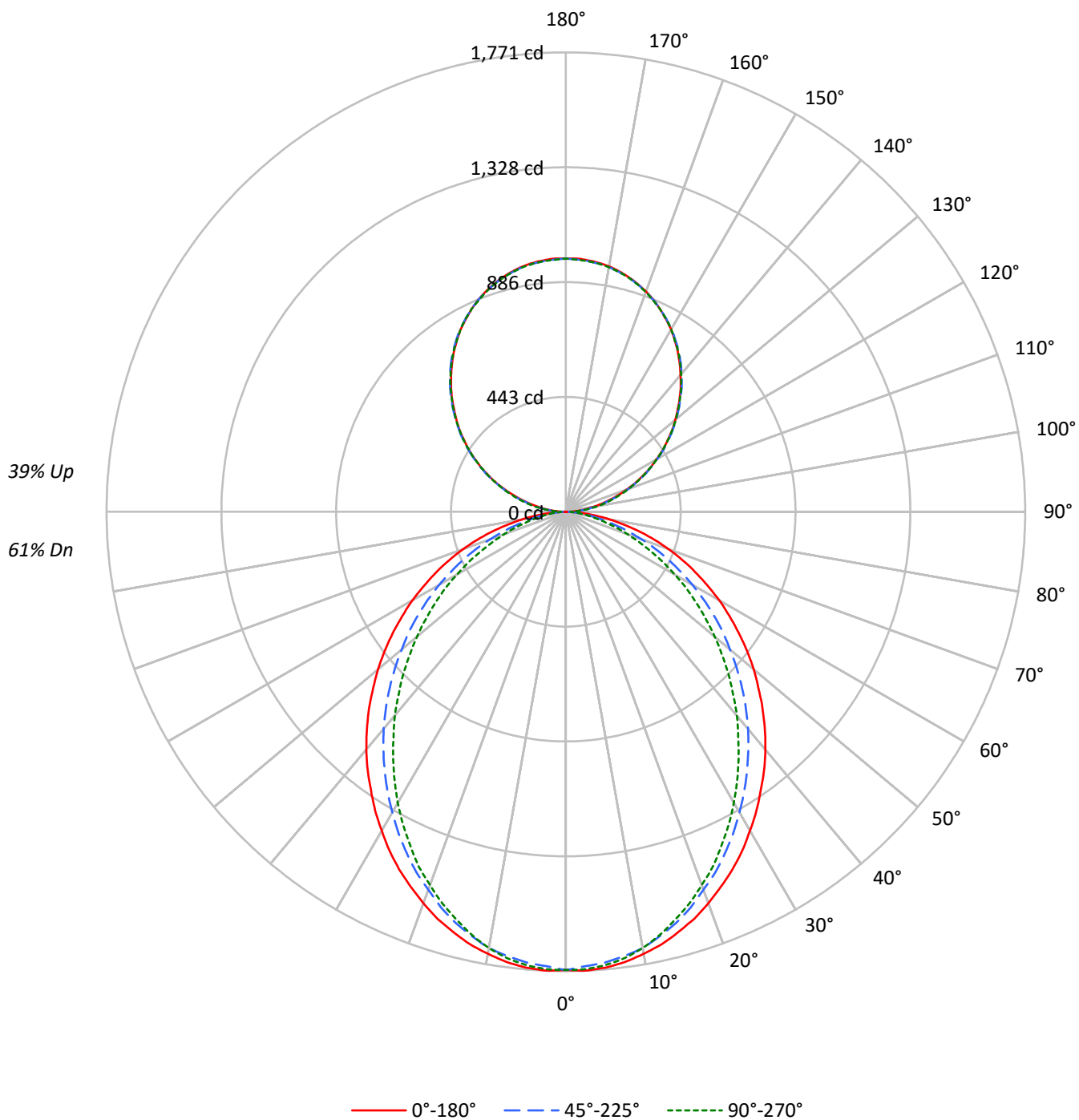
Lumens per Lamp: N/A
Luminaire Lumens: 6899.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 67.9
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: P1028556

CATALOG NUMBER: S125RDIP-B1090D850UB40-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1028556

CATALOG NUMBER: S125RDIP-B1090D850UB40-4F0-XX-W2A-F1

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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	100	96	92	89	94	90	87	84	79	76	74	68	66	65	59	57	56
2	92	84	78	73	85	79	74	69	69	65	62	60	57	54	52	50	48
3	84	74	67	61	78	70	63	58	61	56	52	53	50	46	46	43	41
4	77	66	58	52	72	62	55	49	55	49	45	48	43	40	41	38	35
5	71	59	51	45	66	56	48	43	49	43	39	43	38	35	37	34	31
6	65	53	45	39	61	50	43	37	44	38	34	39	34	31	34	30	27
7	60	48	40	34	56	45	38	33	40	34	30	36	31	27	31	27	24
8	56	44	36	31	52	41	34	29	37	31	27	33	28	24	29	25	22
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20
10	49	37	29	25	46	35	28	24	31	26	22	28	23	20	25	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11319	11319	11319
5°	11321	11037	11055
10°	11210	10759	10664
15°	11052	10369	10150
20°	10855	9901	9611
25°	10629	9444	9034
30°	10354	8941	8427
35°	10072	8431	7783
40°	9805	7906	7153
45°	9484	7339	6494
50°	9157	6739	5823
55°	8778	6147	5127
60°	8391	5470	4407
65°	7930	4714	3629
70°	7392	3838	2856
75°	6648	2886	2082
80°	5607	1869	1403
85°	4197	1004	790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9484 cd/sqm

TEST NUMBER: P1028556

CATALOG NUMBER: S125RDIP-B1090D850UB40-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	2.4
10°-20°	464.7	6.7
20°-30°	673.8	9.8
30°-40°	767.6	11.1
40°-50°	748.2	10.8
50°-60°	629.6	9.1
60°-70°	441.2	6.4
70°-80°	226.2	3.3
80°-90°	57.9	0.8
90°-100°	64.9	0.9
100°-110°	192.8	2.8
110°-120°	326.9	4.7
120°-130°	430.4	6.2
130°-140°	482.3	7.0
140°-150°	472.7	6.9
150°-160°	397.1	5.8
160°-170°	264.0	3.8
170°-180°	92.4	1.3
0°-30°	1304.7	18.9
0°-40°	2072.3	30.0
0°-60°	3450.1	50.0
0°-90°	4175.5	60.5
90°-120°	584.6	8.5
90°-150°	1970.1	28.6
90°-180°	2723.0	39.5
0°-180°	6899.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1767	1767	1767	1767	1767	
5°	1764	1759	1744	1757	1755	167
15°	1677	1669	1641	1640	1628	473
25°	1521	1501	1452	1434	1420	700
35°	1310	1278	1218	1180	1161	821
45°	1073	1034	961	907	887	827
55°	814	771	696	636	615	728
65°	551	506	435	382	362	546
75°	294	254	198	168	159	310
85°	73	49	43	41	40	80
90°	1	7	12	16	18	8
95°	49	51	58	64	65	52
105°	173	177	182	186	188	185
115°	327	330	332	331	330	324
125°	478	482	483	482	481	428
135°	621	626	626	626	624	479
145°	753	756	758	758	756	470
155°	861	861	862	865	861	397
165°	936	935	936	939	934	264
175°	974	970	970	975	970	93
180°	976	976	976	976	976	

TEST NUMBER: P1028556

CATALOG NUMBER: S125RDIP-B1090D850UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1766.7	1766.7	1766.7	1766.7	1766.7
2.5°	1770.7	1766.7	1753.3	1766.7	1765.3
5°	1764.0	1758.7	1744.0	1757.3	1754.7
7.5°	1750.7	1745.3	1728.0	1738.6	1736.0
10°	1730.6	1726.6	1708.0	1712.0	1708.0
12.5°	1708.0	1702.6	1675.9	1678.6	1671.9
15°	1677.3	1669.3	1641.2	1639.9	1627.9
17.5°	1645.2	1633.2	1599.9	1593.2	1583.9
20°	1606.5	1593.2	1550.5	1543.8	1531.8
22.5°	1563.8	1550.5	1505.1	1490.5	1481.1
25°	1521.1	1501.1	1451.8	1434.4	1419.7
27.5°	1473.1	1449.1	1397.1	1374.4	1359.7
30°	1419.7	1394.4	1338.3	1307.7	1295.6
32.5°	1367.7	1337.0	1279.6	1244.9	1228.9
35°	1310.3	1278.3	1218.3	1179.6	1160.9
37.5°	1255.6	1216.9	1155.5	1110.2	1091.5
40°	1196.9	1156.9	1092.8	1042.1	1026.1
42.5°	1135.5	1094.2	1027.4	979.4	954.1
45°	1072.8	1034.1	960.7	907.4	887.3
47.5°	1007.4	967.4	894.0	839.3	816.6
50°	946.0	902.0	826.0	769.9	749.9
52.5°	879.3	834.0	763.2	701.9	681.8
55°	813.9	771.2	696.5	636.5	615.1
57.5°	747.2	701.9	629.8	571.1	552.4
60°	683.2	636.5	564.4	505.7	485.7
62.5°	615.1	571.1	497.7	444.3	424.3
65°	551.1	505.7	435.0	381.6	361.6
67.5°	487.0	441.7	373.6	322.9	306.9
70°	421.7	376.3	309.6	268.2	252.2
72.5°	357.6	313.6	252.2	214.8	205.5
75°	293.6	253.5	197.5	168.1	158.8
77.5°	228.2	196.1	149.4	126.8	118.8
80°	173.5	141.4	104.1	92.1	89.4
82.5°	120.1	92.1	69.4	65.4	64.0
85°	73.4	49.4	42.7	41.4	40.0
87.5°	30.7	21.3	20.0	20.0	18.7
90°	0.8	6.8	12.2	15.9	18.2
92.5°	22.8	26.6	33.4	38.7	40.2
95°	49.4	50.9	58.5	63.8	65.3
97.5°	75.9	76.7	87.3	91.9	92.6
100°	106.3	106.3	116.2	123.0	124.5
102.5°	139.0	142.8	146.6	154.2	156.4
105°	173.1	176.9	181.5	186.1	188.3
107.5°	210.4	214.2	217.9	220.2	220.2
110°	249.1	252.9	255.2	257.4	256.7



TEST NUMBER: P1028556

CATALOG NUMBER: S125RDIP-B1090D850UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.6	290.1	293.1	293.9	292.4
115°	327.3	330.3	331.9	331.1	330.3
117.5°	366.8	367.6	369.1	369.8	366.8
120°	403.2	407.0	407.8	407.8	404.8
122.5°	442.7	443.5	445.8	445.0	442.7
125°	477.7	482.2	483.0	481.5	480.7
127.5°	516.4	518.7	519.4	518.7	517.2
130°	550.6	554.4	555.9	555.1	553.6
132.5°	584.7	591.6	590.8	590.1	587.8
135°	621.2	625.8	626.5	626.5	623.5
137.5°	655.4	659.9	661.4	662.2	658.4
140°	688.0	691.8	694.1	695.6	691.8
142.5°	720.7	723.7	726.8	727.5	723.7
145°	752.6	755.6	757.9	757.9	755.6
147.5°	782.2	784.5	786.0	788.3	782.2
150°	811.8	811.0	814.1	814.1	812.6
152.5°	836.1	837.6	838.4	840.7	837.6
155°	861.2	861.2	861.9	865.0	861.2
157.5°	883.9	882.4	883.2	886.2	880.9
160°	903.7	901.4	902.2	905.2	901.4
162.5°	921.2	919.6	919.6	923.4	918.9
165°	936.3	934.8	935.6	938.6	934.1
167.5°	950.0	947.0	947.0	951.5	947.0
170°	960.6	957.6	957.6	962.2	956.9
172.5°	968.2	965.2	965.2	969.8	965.2
175°	973.6	970.5	970.5	975.1	969.8
177.5°	977.4	974.3	973.6	978.1	972.8
180°	975.8	975.8	975.8	975.8	975.8

(END OF REPORT)