

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: P1027518

Luminaire Tested: S125DIP-B1090D850UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1027518
REPORT IS A COMBINATION OF REPORTS P1001508 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIP-B1090D850UB40-4F0-XX-W2A-F1
Description: Define 5 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

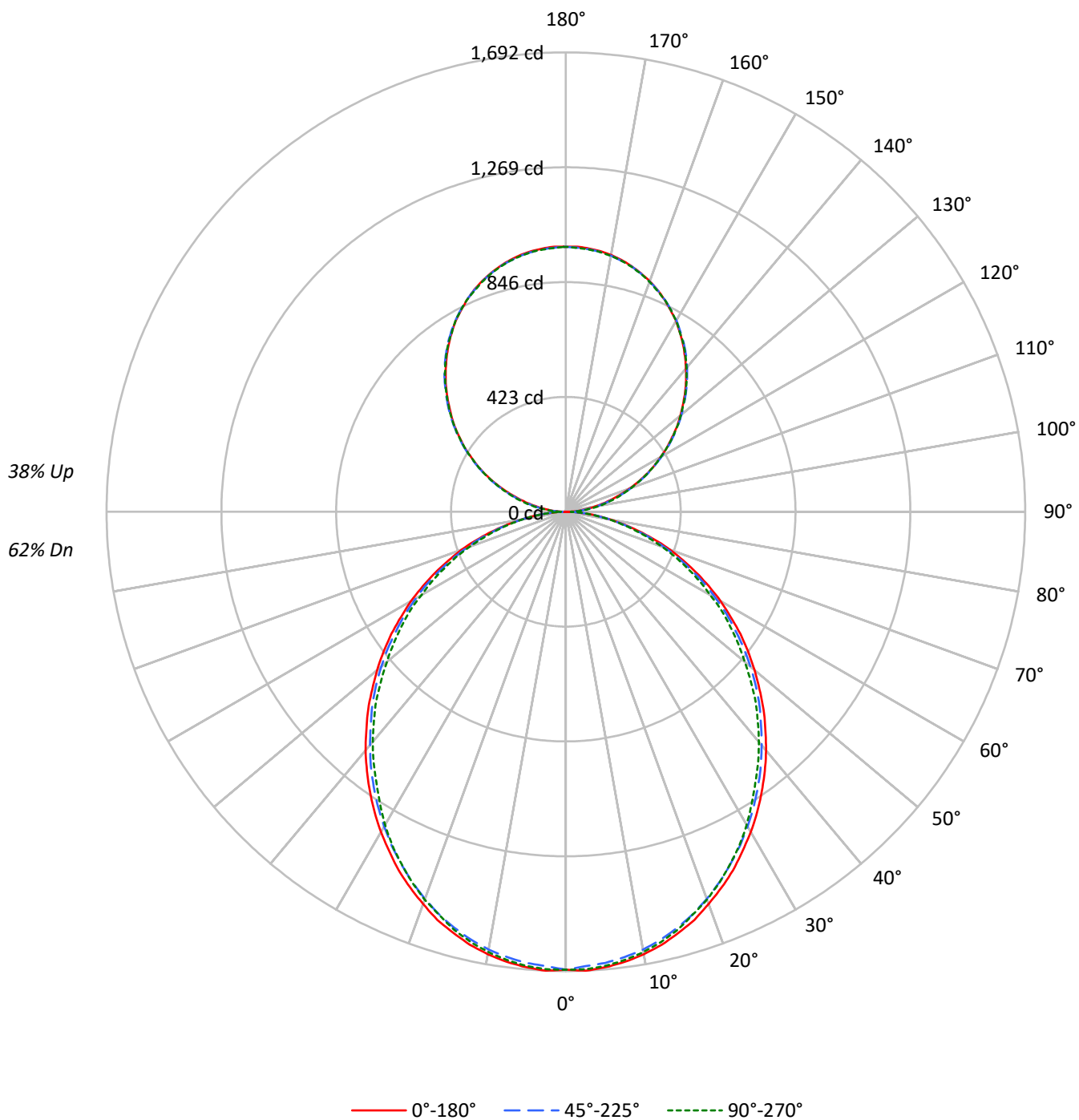
Lumens per Lamp: N/A
Luminaire Lumens: 7115.0 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 67.9
Input Voltage (V):
Input Current (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
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	90	90	90	78	78	78	67	67	67
1	100	96	92	88	94	90	86	83	79	76	74	68	67	65	59	58	56
2	91	84	77	72	85	79	73	68	69	65	61	60	57	54	52	50	47
3	83	74	66	60	78	69	62	57	61	56	51	53	49	46	46	43	40
4	76	65	57	51	71	61	54	48	54	48	44	47	43	39	41	38	35
5	70	58	50	44	65	55	47	42	48	42	38	43	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	38	33	38	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	28	24	21
9	52	39	32	26	48	37	30	25	33	27	23	30	25	21	26	22	19
10	48	36	29	24	45	34	27	23	31	25	21	27	23	19	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10807	10807	10807
5°	10807	10556	10576
10°	10717	10314	10281
15°	10577	10024	9935
20°	10387	9689	9537
25°	10183	9322	9111
30°	9936	8941	8662
35°	9673	8542	8159
40°	9401	8119	7711
45°	9107	7707	7237
50°	8783	7240	6683
55°	8462	6724	6174
60°	8081	6181	5582
65°	7623	5553	4969
70°	7157	4830	4262
75°	6376	3977	3446
80°	5432	2971	2535
85°	4197	1756	1397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9107 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.2	2.2
10°-20°	449.6	6.3
20°-30°	663.7	9.3
30°-40°	774.4	10.9
40°-50°	777.7	10.9
50°-60°	682.7	9.6
60°-70°	508.5	7.1
70°-80°	290.4	4.1
80°-90°	85.4	1.2
90°-100°	64.9	0.9
100°-110°	192.8	2.7
110°-120°	326.9	4.6
120°-130°	430.4	6.0
130°-140°	482.3	6.8
140°-150°	472.7	6.6
150°-160°	397.1	5.6
160°-170°	264.0	3.7
170°-180°	92.4	1.3
0°-30°	1272.4	17.9
0°-40°	2046.8	28.8
0°-60°	3507.2	49.3
0°-90°	4391.5	61.7
90°-120°	584.6	8.2
90°-150°	1970.1	27.7
90°-180°	2723.0	38.3
0°-180°	7115.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1687	1687	1687	1687	1687	
5°	1684	1681	1668	1680	1679	160
15°	1605	1601	1587	1593	1593	453
25°	1457	1450	1433	1436	1432	670
35°	1258	1253	1234	1228	1217	787
45°	1030	1025	1009	993	989	794
55°	785	781	762	750	741	700
65°	530	527	512	500	495	525
75°	282	279	272	268	263	300
85°	73	75	75	73	71	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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1686.7	1686.7	1686.7	1686.7	1686.7
2.5°	1692.0	1688.0	1674.7	1688.0	1686.7
5°	1684.0	1681.3	1668.0	1680.0	1678.7
7.5°	1672.0	1669.3	1654.6	1666.7	1665.3
10°	1654.6	1652.0	1637.3	1648.0	1646.6
12.5°	1633.3	1628.0	1614.6	1622.6	1622.6
15°	1605.3	1601.3	1586.6	1593.3	1593.3
17.5°	1575.9	1569.2	1554.6	1562.6	1555.9
20°	1537.2	1534.6	1517.2	1526.5	1519.9
22.5°	1498.5	1493.2	1477.2	1482.5	1478.5
25°	1457.2	1450.5	1433.1	1435.8	1431.8
27.5°	1409.1	1405.1	1387.8	1389.1	1385.1
30°	1362.4	1358.4	1338.4	1335.7	1331.7
32.5°	1311.7	1305.0	1287.7	1282.4	1274.3
35°	1258.3	1253.0	1234.3	1227.6	1217.0
37.5°	1203.6	1197.0	1179.6	1170.3	1163.6
40°	1147.6	1140.9	1122.2	1110.2	1106.2
42.5°	1087.5	1082.2	1063.5	1052.8	1046.2
45°	1030.2	1024.8	1008.8	992.8	988.8
47.5°	967.4	968.8	948.8	932.7	923.4
50°	907.4	903.4	887.4	870.0	860.7
52.5°	846.0	843.3	826.0	811.3	800.6
55°	784.6	780.6	761.9	749.9	740.6
57.5°	719.2	717.9	701.9	685.9	681.9
60°	657.9	652.5	637.8	624.5	615.2
62.5°	593.8	589.8	577.8	563.1	556.4
65°	529.8	527.1	512.4	500.4	495.1
67.5°	467.0	461.7	451.0	440.4	437.7
70°	408.3	401.7	389.6	381.6	376.3
72.5°	344.3	340.3	333.6	324.3	318.9
75°	281.6	278.9	272.2	268.2	262.9
77.5°	222.8	221.5	217.5	214.8	210.8
80°	168.1	168.1	165.5	164.1	161.5
82.5°	120.1	117.4	117.4	114.8	114.8
85°	73.4	74.7	74.7	73.4	70.7
87.5°	36.0	36.0	34.7	34.7	32.0
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



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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)