

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: P1026190

Luminaire Tested: S124RDIP-B1195D590UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026190
REPORT IS A COMBINATION OF REPORTS P999170 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1195D590UB40-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

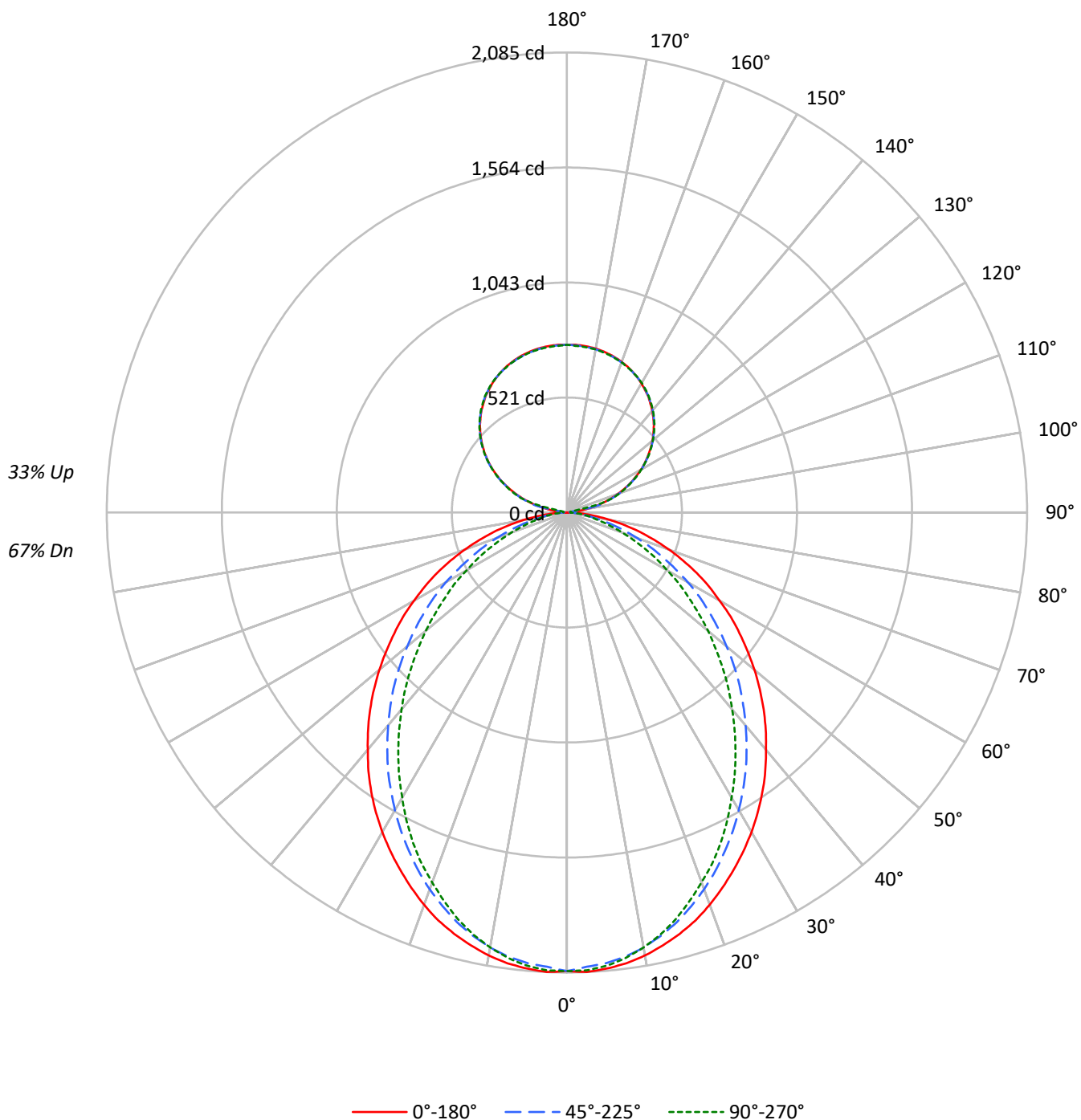
Lumens per Lamp: N/A
Luminaire Lumens: 7155.0 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	102	98	94	90	96	92	89	86	82	80	77	73	71	69	64	63	61
2	93	86	80	74	88	81	76	71	72	68	65	64	61	58	57	54	52
3	85	76	68	62	80	72	65	60	64	59	55	57	53	50	51	48	45
4	78	67	59	53	73	64	57	51	57	52	47	51	47	43	46	42	39
5	72	60	52	46	68	57	50	44	51	45	41	46	41	37	41	37	34
6	66	54	46	40	63	52	44	39	47	40	36	42	37	33	37	33	30
7	62	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27
8	57	45	37	32	54	43	36	31	39	33	28	35	30	26	32	27	24
9	54	41	33	28	50	39	32	27	36	30	26	32	27	24	29	25	22
10	50	38	31	26	47	36	29	25	33	27	23	30	25	22	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16947	16947	16947
5°	16949	16444	16445
10°	16805	15925	15736
15°	16574	15279	14898
20°	16271	14542	13943
25°	15893	13747	13009
30°	15524	12937	11962
35°	15117	12115	10938
40°	14633	11230	9886
45°	14180	10353	8844
50°	13663	9394	7786
55°	13106	8412	6695
60°	12487	7368	5616
65°	11891	6172	4579
70°	11041	4913	3498
75°	9951	3573	2447
80°	8312	2194	1758
85°	6251	1263	966

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14180 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.4	2.7
10°-20°	544.9	7.6
20°-30°	786.7	11.0
30°-40°	891.6	12.5
40°-50°	860.8	12.0
50°-60°	715.7	10.0
60°-70°	494.0	6.9
70°-80°	249.6	3.5
80°-90°	65.0	0.9
90°-100°	25.2	0.4
100°-110°	166.1	2.3
110°-120°	317.2	4.4
120°-130°	402.7	5.6
130°-140°	430.8	6.0
140°-150°	402.8	5.6
150°-160°	324.8	4.5
160°-170°	209.5	2.9
170°-180°	72.2	1.0
0°-30°	1527.0	21.3
0°-40°	2418.5	33.8
0°-60°	3995.0	55.8
0°-90°	4803.6	67.1
90°-120°	508.5	7.1
90°-150°	1744.9	24.4
90°-180°	2351.0	32.9
0°-180°	7155.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2078	2078	2078	2078	2078	
5°	2075	2069	2050	2066	2062	197
15°	1976	1962	1922	1919	1908	557
25°	1787	1758	1693	1666	1650	823
35°	1545	1494	1415	1361	1332	966
45°	1260	1201	1106	1028	999	972
55°	955	891	788	705	675	854
65°	649	581	479	411	392	641
75°	345	286	212	175	166	364
85°	86	54	49	46	46	94
90°	2	8	12	16	17	7
95°	31	12	12	16	16	39
105°	171	174	177	182	162	179
115°	319	321	321	322	322	314
125°	449	451	450	452	452	401
135°	557	556	559	560	561	429
145°	642	644	644	644	646	401
155°	704	705	703	705	704	325
165°	743	740	740	745	739	210
175°	760	756	757	762	755	72
180°	760	760	760	760	760	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2078.2	2078.2	2078.2	2078.2	2078.2
2.5°	2084.6	2078.2	2060.7	2078.2	2076.7
5°	2075.1	2068.7	2049.6	2065.5	2062.3
7.5°	2060.7	2054.4	2030.5	2041.6	2036.9
10°	2038.5	2030.5	2001.9	2008.2	2001.9
12.5°	2009.8	2000.3	1965.3	1968.4	1958.9
15°	1976.4	1962.1	1922.3	1919.1	1908.0
17.5°	1938.2	1917.5	1871.4	1863.4	1847.5
20°	1892.1	1871.4	1817.3	1804.5	1783.9
22.5°	1841.1	1817.3	1758.4	1737.7	1721.8
25°	1787.0	1758.4	1693.1	1666.1	1650.2
27.5°	1731.3	1696.3	1627.9	1596.1	1573.8
30°	1672.5	1632.7	1557.9	1518.1	1492.6
32.5°	1610.4	1564.3	1486.3	1438.5	1414.7
35°	1545.2	1494.2	1414.7	1360.6	1331.9
37.5°	1476.7	1424.2	1336.7	1277.8	1249.2
40°	1403.5	1351.0	1260.3	1193.5	1164.8
42.5°	1333.5	1277.8	1182.3	1113.9	1083.7
45°	1260.3	1201.4	1106.0	1028.0	999.3
47.5°	1185.5	1125.1	1026.4	945.2	913.4
50°	1109.1	1047.1	945.2	865.7	835.4
52.5°	1031.2	970.7	865.7	784.5	752.7
55°	954.8	891.1	787.7	704.9	674.7
57.5°	880.0	813.2	711.3	627.0	604.7
60°	798.8	735.2	633.3	550.6	525.1
62.5°	725.6	658.8	553.8	479.0	459.9
65°	649.3	580.8	479.0	410.6	391.5
67.5°	569.7	504.4	409.0	348.5	326.2
70°	494.9	428.1	337.4	284.8	268.9
72.5°	415.3	356.5	272.1	229.1	214.8
75°	345.3	286.4	211.6	175.0	165.5
77.5°	272.1	221.2	157.5	132.1	128.9
80°	202.1	155.9	108.2	103.4	101.8
82.5°	141.6	100.3	78.0	74.8	73.2
85°	85.9	54.1	49.3	46.1	46.1
87.5°	36.6	23.9	22.3	20.7	22.3
90°	1.7	8.0	12.5	15.9	17.1
92.5°	8.5	7.4	11.9	15.3	15.3
95°	31.3	11.9	12.5	15.9	16.5
97.5°	59.7	72.2	12.5	15.3	15.9
100°	93.2	103.4	25.0	15.3	15.9
102.5°	130.7	137.5	144.4	16.5	16.5
105°	171.1	174.5	177.3	182.4	162.0
107.5°	208.0	209.7	213.7	216.5	218.8
110°	245.5	247.2	250.7	251.8	253.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.9	285.3	286.5	285.9	288.2
115°	319.4	321.1	320.6	321.7	321.7
117.5°	353.0	355.2	356.9	356.4	356.4
120°	387.1	389.3	388.8	389.9	388.8
122.5°	418.9	420.0	421.2	421.7	420.6
125°	449.0	451.3	450.1	451.9	452.4
127.5°	478.0	478.6	481.4	480.8	480.3
130°	505.8	506.4	508.1	508.7	508.7
132.5°	531.4	532.6	534.8	535.4	534.8
135°	557.0	556.4	558.7	559.8	561.0
137.5°	579.7	579.7	582.6	583.7	583.1
140°	601.9	603.0	604.2	605.9	606.5
142.5°	621.8	624.1	624.6	625.8	625.8
145°	642.3	644.0	644.0	644.5	645.7
147.5°	658.2	661.6	661.0	661.6	662.2
150°	675.8	678.1	677.5	677.5	678.1
152.5°	690.6	692.3	691.1	692.3	691.7
155°	704.2	704.8	703.1	705.3	703.6
157.5°	716.1	716.1	713.9	716.7	713.9
160°	726.4	724.7	724.1	727.5	724.1
162.5°	735.5	733.2	732.6	736.0	732.1
165°	742.9	740.0	740.0	744.6	739.4
167.5°	749.1	746.3	745.7	750.8	745.1
170°	754.2	750.8	751.4	755.9	750.2
172.5°	757.6	754.2	754.8	759.3	753.1
175°	759.9	756.5	757.1	762.2	755.4
177.5°	761.6	757.6	758.8	763.3	756.5
180°	759.9	759.9	759.9	759.9	759.9

(END OF REPORT)