

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: P1026070

Luminaire Tested: S124RDIP-B1020D810UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026070
REPORT IS A COMBINATION OF REPORTS P999010 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D810UB40-4F0-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

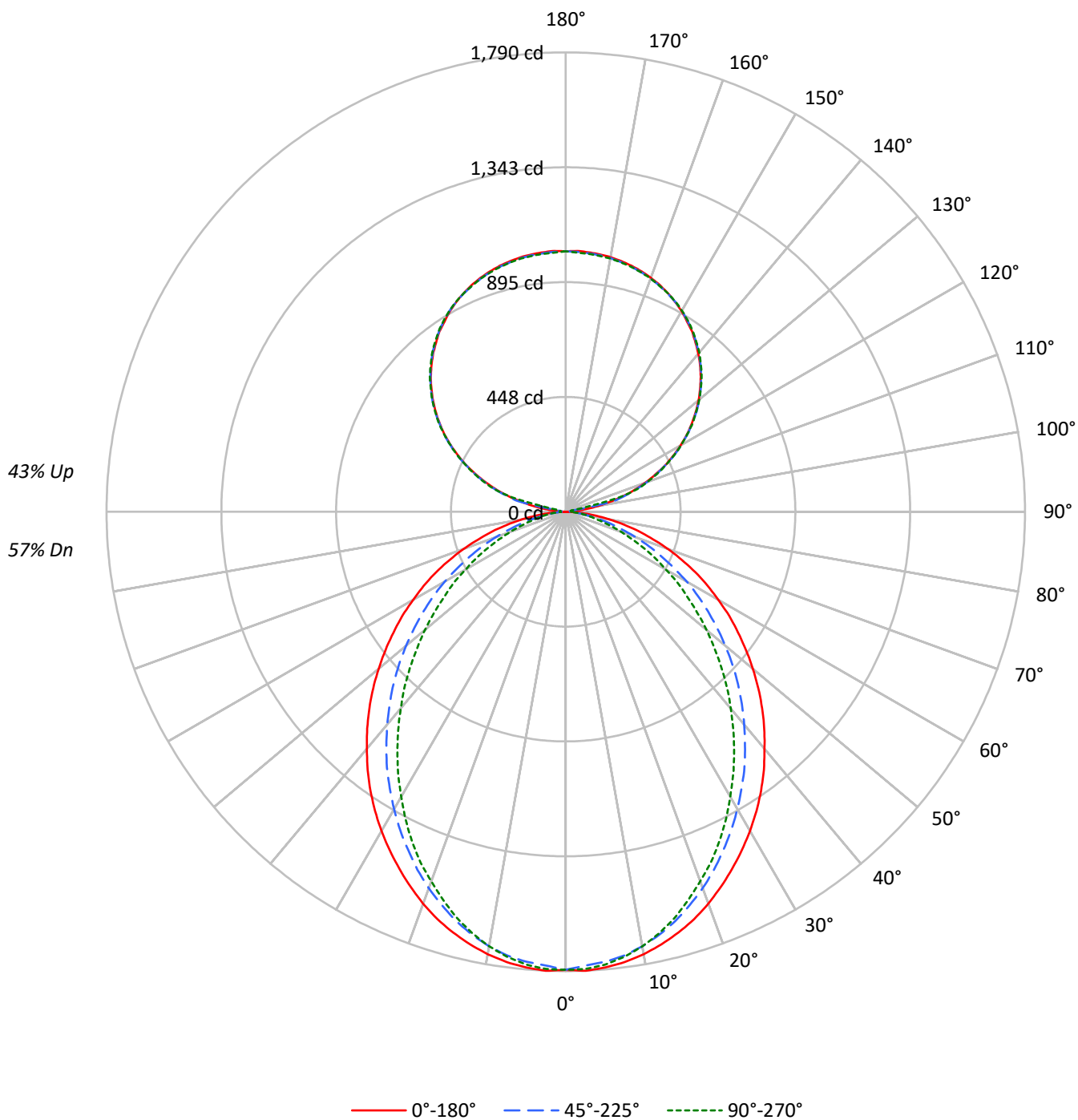
Lumens per Lamp: N/A
Luminaire Lumens: 7267.0 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	100	95	92	88	93	89	86	83	77	74	72	66	64	62	56	54	53
2	91	84	78	72	84	78	73	68	68	64	60	58	55	53	49	47	45
3	83	74	67	61	77	69	63	57	60	55	51	52	48	45	44	41	39
4	76	66	58	52	71	61	54	49	54	48	44	46	42	39	39	36	34
5	70	59	50	44	65	55	48	42	48	42	38	42	37	34	36	32	30
6	65	53	45	39	60	49	42	37	43	38	33	38	33	30	32	29	26
7	60	48	40	34	56	45	38	33	39	34	29	34	30	26	30	26	23
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	27	24	21
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19
10	49	36	29	24	45	34	28	23	31	25	21	27	23	19	23	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14554	14554	14554
5°	14556	14122	14123
10°	14432	13676	13513
15°	14233	13122	12794
20°	13973	12489	11974
25°	13649	11806	11172
30°	13332	11110	10273
35°	12983	10404	9394
40°	12568	9645	8490
45°	12178	8891	7595
50°	11734	8068	6687
55°	11256	7225	5749
60°	10724	6328	4824
65°	10212	5301	3932
70°	9482	4219	3005
75°	8547	3070	2101
80°	7140	1884	1511
85°	5370	1086	830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	2.3
10°-20°	467.9	6.4
20°-30°	675.6	9.3
30°-40°	765.7	10.5
40°-50°	739.3	10.2
50°-60°	614.6	8.5
60°-70°	424.2	5.8
70°-80°	214.4	2.9
80°-90°	56.5	0.8
90°-100°	33.7	0.5
100°-110°	221.9	3.1
110°-120°	423.7	5.8
120°-130°	537.9	7.4
130°-140°	575.4	7.9
140°-150°	538.1	7.4
150°-160°	433.9	6.0
160°-170°	279.8	3.9
170°-180°	96.4	1.3
0°-30°	1311.4	18.0
0°-40°	2077.1	28.6
0°-60°	3431.0	47.2
0°-90°	4126.1	56.8
90°-120°	679.3	9.3
90°-150°	2330.7	32.1
90°-180°	3141.0	43.2
0°-180°	7267.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1782	1777	1760	1774	1771	169
15°	1697	1685	1651	1648	1639	478
25°	1535	1510	1454	1431	1417	707
35°	1327	1283	1215	1168	1144	829
45°	1082	1032	950	883	858	835
55°	820	765	676	605	579	734
65°	558	499	411	353	336	551
75°	297	246	182	150	142	313
85°	74	46	42	40	40	81
90°	2	11	17	21	23	6
95°	42	16	17	21	22	51
105°	228	233	237	244	216	239
115°	427	429	428	430	430	420
125°	600	603	601	604	604	536
135°	744	743	746	748	749	573
145°	858	860	860	861	862	536
155°	941	941	939	942	940	434
165°	992	988	988	994	988	280
175°	1015	1010	1011	1018	1009	97
180°	1015	1015	1015	1015	1015	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.8	1784.8	1784.8	1784.8	1784.8
2.5°	1790.3	1784.8	1769.8	1784.8	1783.4
5°	1782.1	1776.6	1760.2	1773.9	1771.1
7.5°	1769.8	1764.3	1743.8	1753.4	1749.3
10°	1750.6	1743.8	1719.2	1724.7	1719.2
12.5°	1726.0	1717.8	1687.8	1690.5	1682.3
15°	1697.3	1685.0	1650.9	1648.2	1638.6
17.5°	1664.5	1646.8	1607.2	1600.3	1586.7
20°	1624.9	1607.2	1560.7	1549.8	1532.0
22.5°	1581.2	1560.7	1510.1	1492.4	1478.7
25°	1534.7	1510.1	1454.1	1430.9	1417.2
27.5°	1486.9	1456.8	1398.1	1370.7	1351.6
30°	1436.3	1402.2	1337.9	1303.8	1281.9
32.5°	1383.0	1343.4	1276.4	1235.4	1214.9
35°	1327.0	1283.3	1214.9	1168.5	1143.9
37.5°	1268.2	1223.1	1148.0	1097.4	1072.8
40°	1205.4	1160.3	1082.4	1025.0	1000.4
42.5°	1145.2	1097.4	1015.4	956.6	930.7
45°	1082.4	1031.8	949.8	882.8	858.2
47.5°	1018.1	966.2	881.5	811.8	784.4
50°	952.5	899.2	811.8	743.4	717.5
52.5°	885.6	833.6	743.4	673.7	646.4
55°	820.0	765.3	676.5	605.4	579.4
57.5°	755.7	698.3	610.9	538.5	519.3
60°	686.0	631.4	543.9	472.9	451.0
62.5°	623.2	565.8	475.6	411.4	395.0
65°	557.6	498.8	411.4	352.6	336.2
67.5°	489.3	433.2	351.2	299.3	280.2
70°	425.0	367.6	289.7	244.6	231.0
72.5°	356.7	306.1	233.7	196.8	184.5
75°	296.6	246.0	181.8	150.3	142.1
77.5°	233.7	190.0	135.3	113.4	110.7
80°	173.6	133.9	92.9	88.8	87.5
82.5°	121.6	86.1	67.0	64.2	62.9
85°	73.8	46.5	42.4	39.6	39.6
87.5°	31.4	20.5	19.1	17.8	19.1
90°	2.3	10.6	16.7	21.3	22.8
92.5°	11.4	9.9	15.9	20.5	20.5
95°	41.8	15.9	16.7	21.3	22.0
97.5°	79.7	96.4	16.7	20.5	21.3
100°	124.5	138.2	33.4	20.5	21.3
102.5°	174.6	183.7	192.8	22.0	22.0
105°	228.5	233.1	236.9	243.7	216.4
107.5°	277.9	280.1	285.5	289.3	292.3
110°	328.0	330.2	334.8	336.3	338.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	376.6	381.1	382.6	381.9	384.9
115°	426.7	428.9	428.2	429.7	429.7
117.5°	471.5	474.5	476.8	476.0	476.0
120°	517.0	520.0	519.3	520.8	519.3
122.5°	559.5	561.0	562.6	563.3	561.8
125°	599.8	602.8	601.3	603.6	604.3
127.5°	638.5	639.2	643.0	642.3	641.5
130°	675.7	676.4	678.7	679.5	679.5
132.5°	709.8	711.4	714.4	715.2	714.4
135°	744.0	743.3	746.3	747.8	749.3
137.5°	774.4	774.4	778.2	779.7	778.9
140°	804.0	805.5	807.0	809.3	810.1
142.5°	830.6	833.6	834.4	835.9	835.9
145°	857.9	860.2	860.2	860.9	862.4
147.5°	879.1	883.7	882.9	883.7	884.5
150°	902.7	905.7	905.0	905.0	905.7
152.5°	922.4	924.7	923.2	924.7	923.9
155°	940.6	941.4	939.1	942.2	939.9
157.5°	956.6	956.6	953.5	957.3	953.5
160°	970.3	968.0	967.2	971.8	967.2
162.5°	982.4	979.4	978.6	983.2	977.8
165°	992.3	988.5	988.5	994.5	987.7
167.5°	1000.6	996.8	996.1	1002.9	995.3
170°	1007.5	1002.9	1003.7	1009.7	1002.1
172.5°	1012.0	1007.5	1008.2	1014.3	1005.9
175°	1015.0	1010.5	1011.2	1018.1	1009.0
177.5°	1017.3	1012.0	1013.5	1019.6	1010.5
180°	1015.0	1015.0	1015.0	1015.0	1015.0

(END OF REPORT)