

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: P1013229

Luminaire Tested: S124RDIP-B1020D365UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1013229
REPORT IS A COMBINATION OF REPORTS P998911 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D365UB2750-4F0-XX-W2A-F_3000K
Description: Define 4 Regressed Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

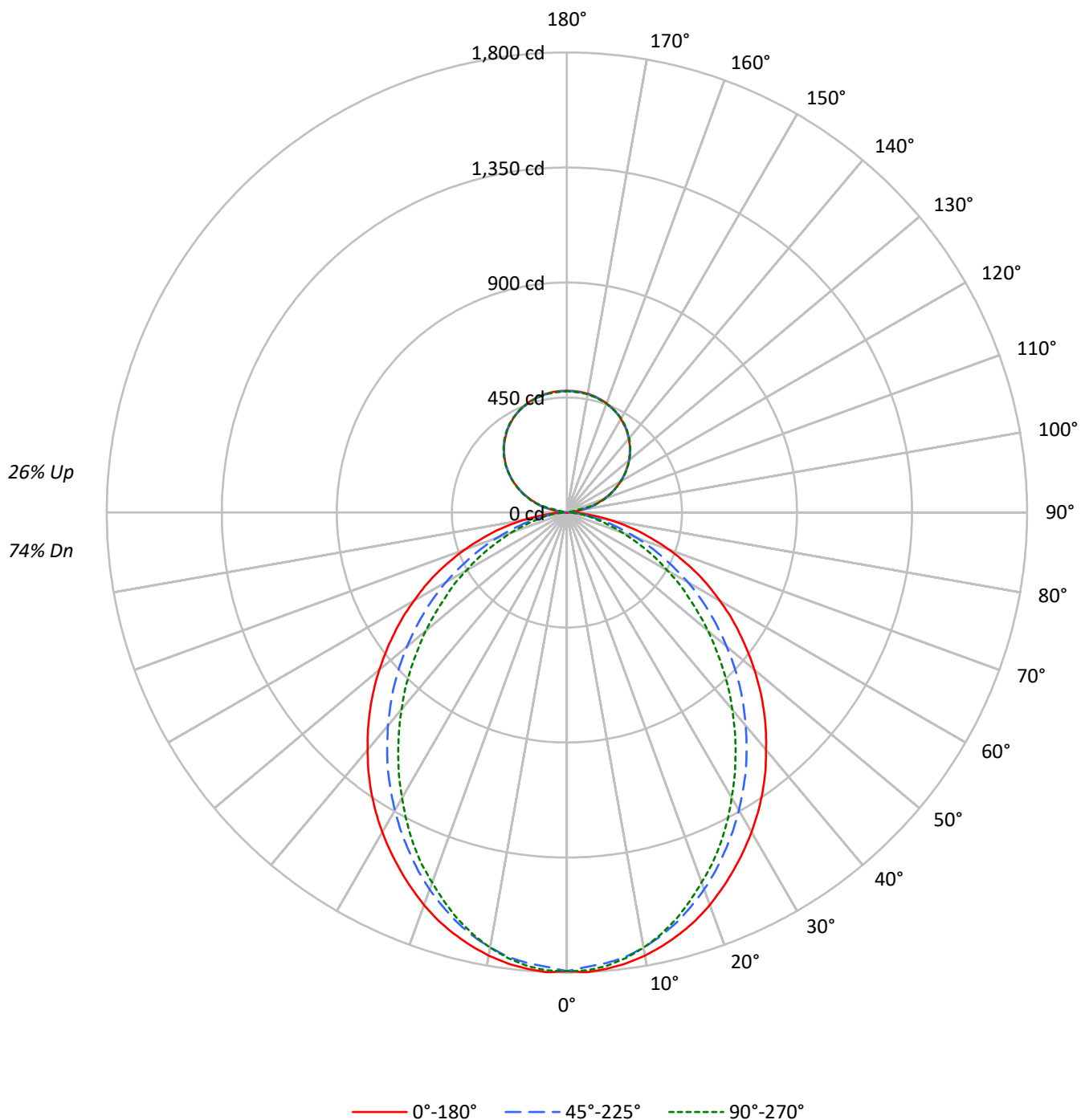
Lumens per Lamp: N/A
Luminaire Lumens: 5619.0 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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	50	30	10
RCR																				
0	113	113	113	113	107	107	107	107	97	97	97	87	87	87	78	78	78	74		
1	104	99	95	92	98	94	91	88	85	83	80	77	75	73	70	68	67	63		
2	95	87	81	76	90	83	78	73	75	71	67	68	65	62	62	59	57	53		
3	87	77	70	64	82	73	67	61	67	61	57	61	56	53	55	52	49	46		
4	79	68	60	54	75	65	58	52	60	54	49	54	50	46	49	46	42	39		
5	73	61	53	47	69	59	51	45	54	47	43	49	44	40	45	41	37	35		
6	68	55	47	41	64	53	45	40	49	42	38	45	39	35	41	36	33	30		
7	63	50	42	36	60	48	41	35	44	38	33	41	35	31	37	33	29	27		
8	58	46	38	32	55	44	37	32	41	34	30	37	32	28	34	30	26	24		
9	55	42	34	29	52	40	33	28	37	31	27	35	29	25	32	27	24	22		
10	51	39	31	26	49	37	30	26	35	29	24	32	27	23	30	25	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14636	14636	14636
5°	14637	14200	14202
10°	14513	13752	13589
15°	14313	13195	12865
20°	14052	12559	12040
25°	13726	11872	11235
30°	13406	11172	10330
35°	13055	10462	9446
40°	12638	9698	8537
45°	12245	8941	7638
50°	11800	8113	6725
55°	11318	7265	5782
60°	10785	6364	4850
65°	10268	5329	3954
70°	9535	4242	3021
75°	8593	3087	2113
80°	7177	1894	1520
85°	5399	1092	836

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12245 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	3.0
10°-20°	470.6	8.4
20°-30°	679.4	12.1
30°-40°	769.9	13.7
40°-50°	743.4	13.2
50°-60°	618.1	11.0
60°-70°	426.6	7.6
70°-80°	215.6	3.8
80°-90°	55.7	1.0
90°-100°	15.8	0.3
100°-110°	103.9	1.8
110°-120°	198.4	3.5
120°-130°	251.9	4.5
130°-140°	269.5	4.8
140°-150°	252.0	4.5
150°-160°	203.2	3.6
160°-170°	131.1	2.3
170°-180°	45.2	0.8
0°-30°	1318.7	23.5
0°-40°	2088.6	37.2
0°-60°	3450.1	61.4
0°-90°	4148.0	73.8
90°-120°	318.1	5.7
90°-150°	1091.6	19.4
90°-180°	1471.0	26.2
0°-180°	5619.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1795	1795	1795	1795	1795	
5°	1792	1786	1770	1784	1781	170
15°	1707	1694	1660	1657	1648	481
25°	1543	1518	1462	1439	1425	711
35°	1334	1290	1222	1175	1150	834
45°	1088	1038	955	888	863	839
55°	824	770	680	609	583	738
65°	561	502	414	355	338	554
75°	298	247	183	151	143	315
85°	74	47	43	40	40	81
90°	1	5	8	10	11	5
95°	20	8	8	10	10	24
105°	107	109	111	114	101	112
115°	200	201	200	201	201	197
125°	281	282	282	283	283	251
135°	348	348	350	350	351	269
145°	402	403	403	403	404	251
155°	440	441	440	441	440	203
165°	465	463	463	466	463	131
175°	475	473	474	477	472	45
180°	475	475	475	475	475	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1794.8	1794.8	1794.8	1794.8	1794.8
2.5°	1800.3	1794.8	1779.7	1794.8	1793.4
5°	1792.0	1786.5	1770.0	1783.8	1781.0
7.5°	1779.7	1774.2	1753.5	1763.2	1759.0
10°	1760.4	1753.5	1728.8	1734.3	1728.8
12.5°	1735.7	1727.4	1697.2	1699.9	1691.7
15°	1706.8	1694.4	1660.1	1657.3	1647.7
17.5°	1673.8	1656.0	1616.1	1609.2	1595.5
20°	1634.0	1616.1	1569.4	1558.4	1540.5
22.5°	1590.0	1569.4	1518.5	1500.7	1486.9
25°	1543.3	1518.5	1462.2	1438.8	1425.1
27.5°	1495.2	1464.9	1405.9	1378.4	1359.1
30°	1444.3	1410.0	1345.4	1311.0	1289.0
32.5°	1390.7	1350.9	1283.5	1242.3	1221.7
35°	1334.4	1290.4	1221.7	1175.0	1150.2
37.5°	1275.3	1230.0	1154.4	1103.5	1078.8
40°	1212.1	1166.7	1088.4	1030.7	1005.9
42.5°	1151.6	1103.5	1021.1	962.0	935.9
45°	1088.4	1037.6	955.1	887.8	863.0
47.5°	1023.8	971.6	886.4	816.3	788.8
50°	957.9	904.3	816.3	747.6	721.5
52.5°	890.5	838.3	747.6	677.5	650.0
55°	824.5	769.6	680.3	608.8	582.7
57.5°	760.0	702.2	614.3	541.5	522.2
60°	689.9	634.9	547.0	475.5	453.5
62.5°	626.7	568.9	478.2	413.6	397.2
65°	560.7	501.6	413.6	354.6	338.1
67.5°	492.0	435.6	353.2	301.0	281.7
70°	427.4	369.7	291.3	246.0	232.2
72.5°	358.7	307.8	235.0	197.9	185.5
75°	298.2	247.4	182.8	151.2	142.9
77.5°	235.0	191.0	136.1	114.1	111.3
80°	174.5	134.7	93.4	89.3	88.0
82.5°	122.3	86.6	67.3	64.6	63.2
85°	74.2	46.7	42.6	39.9	39.9
87.5°	31.6	20.6	19.2	17.9	19.2
90°	1.1	5.0	7.8	10.0	10.7
92.5°	5.3	4.6	7.5	9.6	9.6
95°	19.6	7.5	7.8	10.0	10.3
97.5°	37.3	45.2	7.8	9.6	10.0
100°	58.3	64.7	15.6	9.6	10.0
102.5°	81.8	86.0	90.3	10.3	10.3
105°	107.0	109.2	110.9	114.1	101.3
107.5°	130.1	131.2	133.7	135.5	136.9
110°	153.6	154.7	156.8	157.5	158.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	178.5	179.2	178.8	180.3
115°	199.8	200.9	200.5	201.2	201.2
117.5°	220.8	222.2	223.3	222.9	222.9
120°	242.1	243.6	243.2	243.9	243.2
122.5°	262.1	262.8	263.5	263.8	263.1
125°	280.9	282.3	281.6	282.7	283.0
127.5°	299.0	299.4	301.2	300.8	300.5
130°	316.5	316.8	317.9	318.2	318.2
132.5°	332.5	333.2	334.6	334.9	334.6
135°	348.5	348.1	349.5	350.2	350.9
137.5°	362.7	362.7	364.5	365.2	364.8
140°	376.5	377.3	378.0	379.0	379.4
142.5°	389.0	390.4	390.8	391.5	391.5
145°	401.8	402.9	402.9	403.2	403.9
147.5°	411.7	413.9	413.5	413.9	414.2
150°	422.8	424.2	423.8	423.8	424.2
152.5°	432.0	433.1	432.4	433.1	432.7
155°	440.5	440.9	439.8	441.3	440.2
157.5°	448.0	448.0	446.6	448.4	446.6
160°	454.4	453.3	453.0	455.1	453.0
162.5°	460.1	458.7	458.3	460.5	458.0
165°	464.7	462.9	462.9	465.8	462.6
167.5°	468.6	466.9	466.5	469.7	466.1
170°	471.8	469.7	470.1	472.9	469.3
172.5°	474.0	471.8	472.2	475.0	471.1
175°	475.4	473.3	473.6	476.8	472.5
177.5°	476.5	474.0	474.7	477.5	473.3
180°	475.4	475.4	475.4	475.4	475.4

(END OF REPORT)