

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: P1013231

Luminaire Tested: S124RDIP-B1020D365UB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1013231
REPORT IS A COMBINATION OF REPORTS P998913 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_4000K
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

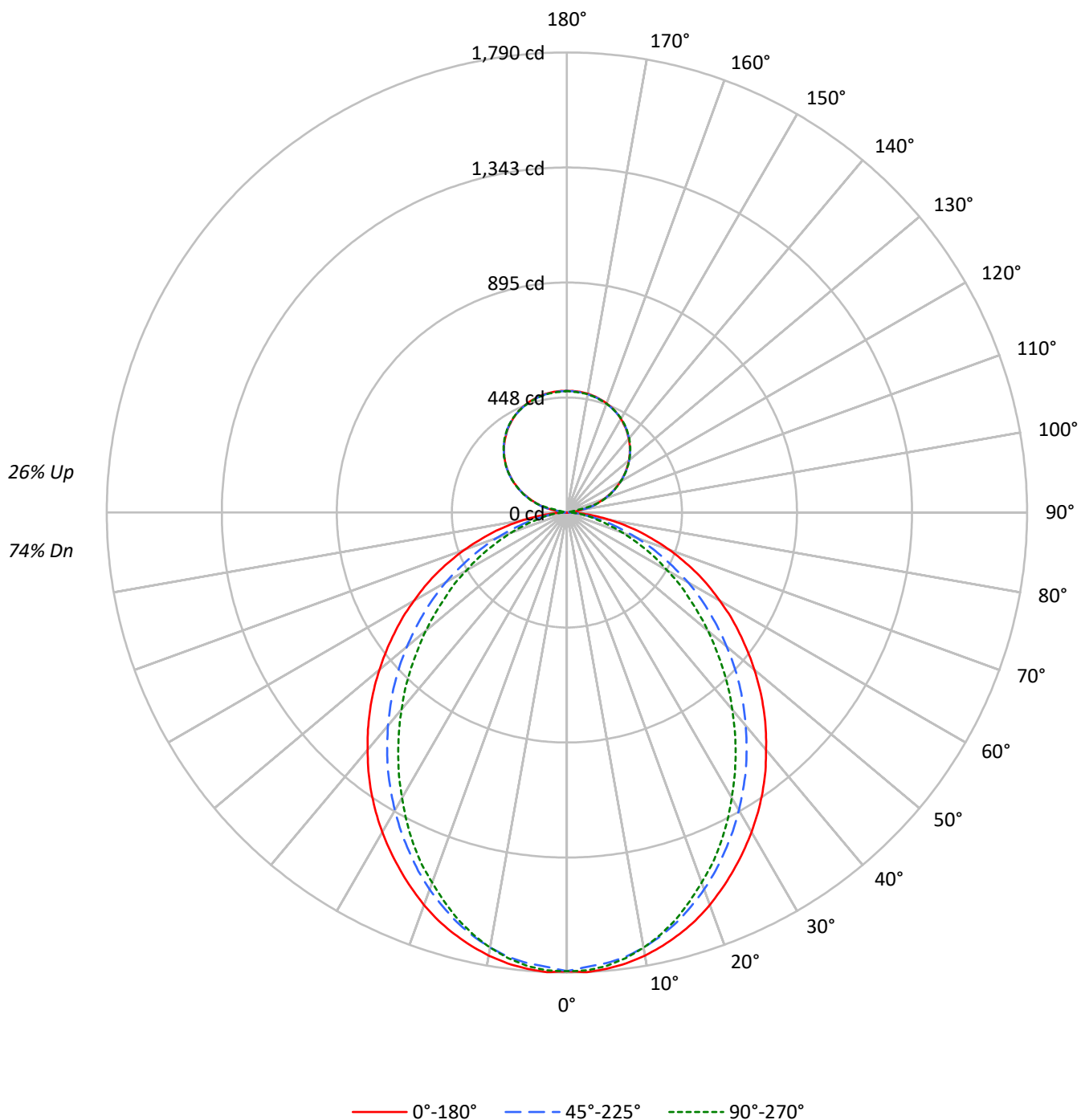
Lumens per Lamp: N/A
Luminaire Lumens: 5588.0 lumens
Efficiency: N/A
Efficacy: 99.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	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	3.0
10°-20°	467.9	8.4
20°-30°	675.6	12.1
30°-40°	765.7	13.7
40°-50°	739.3	13.2
50°-60°	614.6	11.0
60°-70°	424.2	7.6
70°-80°	214.4	3.8
80°-90°	55.4	1.0
90°-100°	15.7	0.3
100°-110°	103.4	1.8
110°-120°	197.4	3.5
120°-130°	250.5	4.5
130°-140°	268.0	4.8
140°-150°	250.6	4.5
150°-160°	202.1	3.6
160°-170°	130.3	2.3
170°-180°	44.9	0.8
0°-30°	1311.4	23.5
0°-40°	2077.1	37.2
0°-60°	3431.0	61.4
0°-90°	4125.0	73.8
90°-120°	316.4	5.7
90°-150°	1085.6	19.4
90°-180°	1463.0	26.2
0°-180°	5588.0	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°	1	5	8	10	11	5
95°	19	7	8	10	10	24
105°	106	109	110	114	101	111
115°	199	200	199	200	200	196
125°	279	281	280	281	282	249
135°	347	346	348	348	349	267
145°	400	401	401	401	402	250
155°	438	438	437	439	438	202
165°	462	460	460	463	460	131
175°	473	471	471	474	470	45
180°	473	473	473	473	473	

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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°	1.1	5.0	7.8	9.9	10.6
92.5°	5.3	4.6	7.4	9.5	9.5
95°	19.4	7.4	7.8	9.9	10.3
97.5°	37.1	44.9	7.8	9.5	9.9
100°	58.0	64.4	15.6	9.5	9.9
102.5°	81.3	85.6	89.8	10.3	10.3
105°	106.4	108.6	110.3	113.5	100.8
107.5°	129.4	130.5	133.0	134.7	136.1
110°	152.8	153.8	156.0	156.7	157.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.4	177.5	178.2	177.9	179.3
115°	198.7	199.8	199.4	200.2	200.2
117.5°	219.6	221.0	222.1	221.7	221.7
120°	240.8	242.2	241.9	242.6	241.9
122.5°	260.6	261.3	262.0	262.4	261.7
125°	279.4	280.8	280.1	281.1	281.5
127.5°	297.4	297.8	299.5	299.2	298.8
130°	314.7	315.1	316.1	316.5	316.5
132.5°	330.6	331.4	332.8	333.1	332.8
135°	346.6	346.2	347.6	348.3	349.0
137.5°	360.7	360.7	362.5	363.2	362.8
140°	374.5	375.2	375.9	377.0	377.3
142.5°	386.9	388.3	388.6	389.3	389.3
145°	399.6	400.7	400.7	401.0	401.7
147.5°	409.5	411.6	411.3	411.6	412.0
150°	420.5	421.9	421.5	421.5	421.9
152.5°	429.7	430.7	430.0	430.7	430.4
155°	438.1	438.5	437.4	438.9	437.8
157.5°	445.6	445.6	444.2	445.9	444.2
160°	451.9	450.9	450.5	452.6	450.5
162.5°	457.6	456.2	455.8	458.0	455.5
165°	462.2	460.4	460.4	463.3	460.1
167.5°	466.1	464.3	464.0	467.1	463.6
170°	469.3	467.1	467.5	470.3	466.8
172.5°	471.4	469.3	469.6	472.5	468.6
175°	472.8	470.7	471.0	474.2	470.0
177.5°	473.9	471.4	472.1	474.9	470.7
180°	472.8	472.8	472.8	472.8	472.8

(END OF REPORT)