

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: P1026017

Luminaire Tested: S124RDIP-B1020D365UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026017
REPORT IS A COMBINATION OF REPORTS P998937 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D365UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

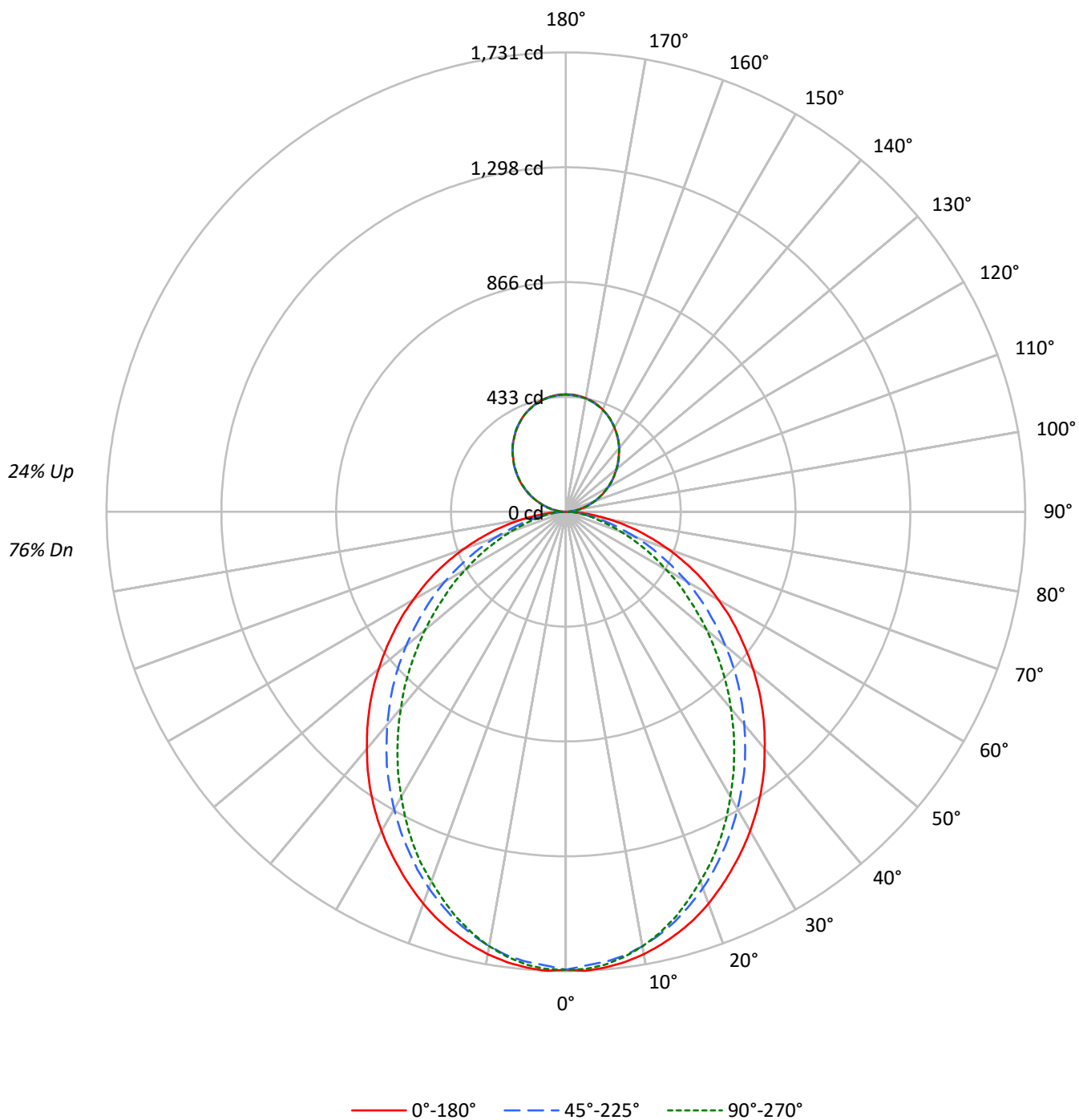
Lumens per Lamp: N/A
Luminaire Lumens: 5215.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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
RCR																	
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	80	80	80
1	104	100	96	92	99	95	92	89	87	84	82	79	77	75	72	70	69
2	95	88	81	76	90	84	78	74	77	72	68	70	66	63	64	61	59
3	87	77	70	64	83	74	67	62	68	62	58	62	58	54	57	53	50
4	80	69	61	55	76	66	59	53	61	55	50	56	51	47	51	47	44
5	74	62	53	47	70	59	52	46	55	48	43	50	45	41	46	42	38
6	68	56	47	41	65	54	46	40	49	43	38	46	40	36	42	38	34
7	63	51	42	37	60	49	41	36	45	39	34	42	36	32	39	34	30
8	59	46	38	33	56	44	37	32	41	35	30	38	33	29	35	31	27
9	55	42	35	29	52	41	34	29	38	32	27	35	30	26	33	28	25
10	52	39	32	27	49	38	31	26	35	29	25	33	28	24	31	26	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14075	14075	14075
5°	14076	13656	13657
10°	13956	13225	13068
15°	13765	12688	12372
20°	13513	12077	11579
25°	13199	11417	10804
30°	12893	10744	9934
35°	12554	10062	9084
40°	12153	9327	8210
45°	11776	8598	7345
50°	11347	7802	6466
55°	10884	6986	5560
60°	10370	6120	4664
65°	9875	5126	3802
70°	9169	4080	2905
75°	8265	2969	2032
80°	6901	1823	1461
85°	5196	1051	803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	3.1
10°-20°	452.5	8.7
20°-30°	653.3	12.5
30°-40°	740.4	14.2
40°-50°	714.9	13.7
50°-60°	594.3	11.4
60°-70°	410.2	7.9
70°-80°	207.3	4.0
80°-90°	53.6	1.0
90°-100°	28.8	0.6
100°-110°	86.3	1.7
110°-120°	146.5	2.8
120°-130°	193.3	3.7
130°-140°	217.1	4.2
140°-150°	213.4	4.1
150°-160°	179.5	3.4
160°-170°	119.4	2.3
170°-180°	41.8	0.8
0°-30°	1268.1	24.3
0°-40°	2008.6	38.5
0°-60°	3317.8	63.6
0°-90°	3988.9	76.5
90°-120°	261.6	5.0
90°-150°	885.4	17.0
90°-180°	1226.0	23.5
0°-180°	5215.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1723	1718	1702	1715	1713	164
15°	1641	1630	1596	1594	1584	463
25°	1484	1460	1406	1384	1370	684
35°	1283	1241	1175	1130	1106	802
45°	1047	998	918	854	830	807
55°	793	740	654	585	560	709
65°	539	482	398	341	325	532
75°	287	238	176	145	137	302
85°	71	45	41	38	38	78
90°	1	5	8	10	10	6
95°	20	24	26	27	27	22
105°	80	80	81	82	83	84
115°	149	149	148	148	148	147
125°	217	217	217	216	215	193
135°	280	282	282	281	280	217
145°	340	341	342	341	340	213
155°	390	390	389	391	389	179
165°	424	423	422	424	423	120
175°	441	440	439	442	439	42
180°	442	442	442	442	442	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1726.0	1726.0	1726.0	1726.0	1726.0
2.5°	1731.2	1726.0	1711.4	1726.0	1724.6
5°	1723.3	1718.0	1702.2	1715.4	1712.7
7.5°	1711.4	1706.1	1686.3	1695.6	1691.6
10°	1692.9	1686.3	1662.5	1667.8	1662.5
12.5°	1669.1	1661.2	1632.1	1634.8	1626.8
15°	1641.4	1629.5	1596.4	1593.8	1584.5
17.5°	1609.7	1592.5	1554.2	1547.5	1534.3
20°	1571.3	1554.2	1509.2	1498.6	1481.5
22.5°	1529.0	1509.2	1460.3	1443.1	1429.9
25°	1484.1	1460.3	1406.1	1383.7	1370.5
27.5°	1437.9	1408.8	1352.0	1325.5	1307.0
30°	1389.0	1355.9	1293.8	1260.8	1239.6
32.5°	1337.4	1299.1	1234.3	1194.7	1174.9
35°	1283.2	1240.9	1174.9	1129.9	1106.1
37.5°	1226.4	1182.8	1110.1	1061.2	1037.4
40°	1165.6	1122.0	1046.7	991.2	967.4
42.5°	1107.5	1061.2	981.9	925.1	900.0
45°	1046.7	997.8	918.5	853.7	829.9
47.5°	984.6	934.3	852.4	785.0	758.6
50°	921.1	869.6	785.0	718.9	693.8
52.5°	856.4	806.2	718.9	651.5	625.1
55°	792.9	740.1	654.2	585.4	560.3
57.5°	730.8	675.3	590.7	520.7	502.2
60°	663.4	610.6	526.0	457.3	436.1
62.5°	602.6	547.1	459.9	397.8	381.9
65°	539.2	482.4	397.8	341.0	325.1
67.5°	473.1	418.9	339.6	289.4	270.9
70°	411.0	355.5	280.2	236.6	223.3
72.5°	344.9	296.0	226.0	190.3	178.4
75°	286.8	237.9	175.8	145.4	137.4
77.5°	226.0	183.7	130.8	109.7	107.0
80°	167.8	129.5	89.9	85.9	84.6
82.5°	117.6	83.3	64.8	62.1	60.8
85°	71.4	44.9	41.0	38.3	38.3
87.5°	30.4	19.8	18.5	17.2	18.5
90°	1.0	4.8	7.5	9.6	10.3
92.5°	8.9	13.3	15.0	16.1	16.4
95°	20.5	23.6	26.0	27.0	27.0
97.5°	32.8	35.5	38.3	39.6	39.6
100°	47.8	49.2	52.3	53.0	53.0
102.5°	63.6	63.9	66.6	67.7	68.0
105°	79.6	80.0	81.3	82.4	83.4
107.5°	96.4	96.7	97.1	98.4	98.1
110°	113.5	114.1	113.8	113.1	114.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	131.2	131.2	130.5	130.5	130.5
115°	149.0	149.0	148.3	148.0	147.6
117.5°	165.7	165.7	165.4	164.4	163.4
120°	182.5	183.9	182.8	181.1	181.8
122.5°	199.9	200.3	199.9	198.9	197.2
125°	217.0	217.0	216.7	216.0	215.3
127.5°	232.4	233.4	232.7	232.0	231.7
130°	248.8	249.8	249.8	249.1	247.8
132.5°	265.5	266.2	265.9	265.2	264.9
135°	279.9	281.9	281.9	281.3	280.2
137.5°	296.0	297.0	297.7	296.6	297.0
140°	312.0	312.7	312.7	312.4	312.0
142.5°	326.7	327.4	327.1	327.1	327.1
145°	340.0	341.4	341.7	341.4	340.4
147.5°	353.7	355.4	355.1	354.7	354.4
150°	366.0	367.4	367.4	367.4	367.0
152.5°	377.6	378.3	378.7	379.7	378.7
155°	389.6	389.6	389.3	390.6	389.3
157.5°	399.8	399.2	399.2	400.2	399.2
160°	408.7	408.4	408.0	409.1	407.4
162.5°	416.9	415.9	415.6	417.6	415.9
165°	424.1	423.1	422.4	424.5	423.1
167.5°	429.9	428.6	428.6	430.6	428.6
170°	434.7	433.0	433.3	435.4	433.0
172.5°	438.1	436.8	436.8	439.1	436.8
175°	441.2	439.5	439.1	441.5	439.1
177.5°	442.6	440.9	440.9	443.2	440.5
180°	441.9	441.9	441.9	441.9	441.9

(END OF REPORT)