

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: P1026016

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026016
REPORT IS A COMBINATION OF REPORTS P998936 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-F
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

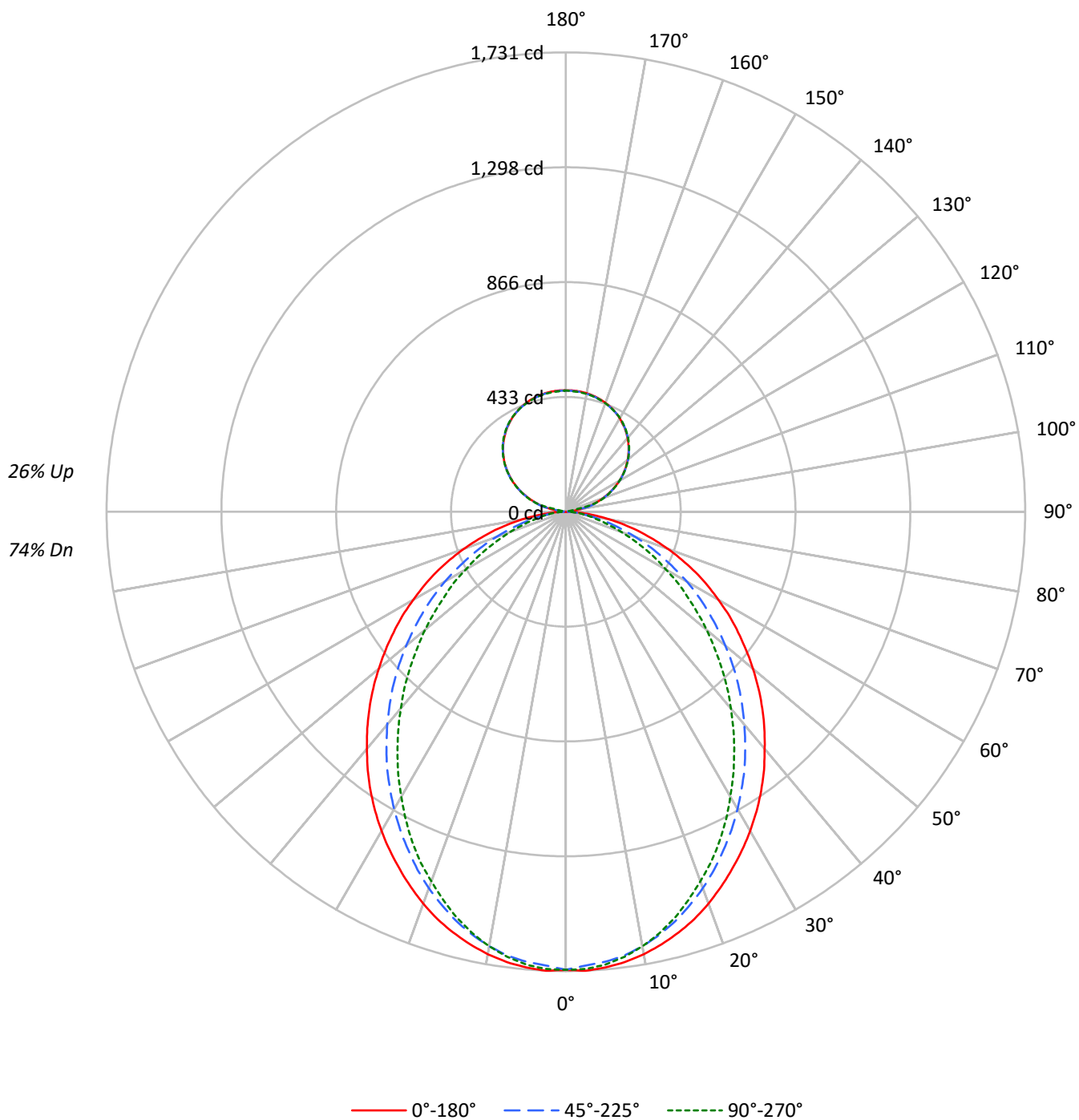
Lumens per Lamp: N/A
Luminaire Lumens: 5403.0 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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	3.0
10°-20°	452.5	8.4
20°-30°	653.3	12.1
30°-40°	740.4	13.7
40°-50°	714.9	13.2
50°-60°	594.3	11.0
60°-70°	410.2	7.6
70°-80°	207.3	3.8
80°-90°	53.6	1.0
90°-100°	15.2	0.3
100°-110°	99.9	1.8
110°-120°	190.8	3.5
120°-130°	242.2	4.5
130°-140°	259.1	4.8
140°-150°	242.2	4.5
150°-160°	195.4	3.6
160°-170°	126.0	2.3
170°-180°	43.4	0.8
0°-30°	1268.1	23.5
0°-40°	2008.6	37.2
0°-60°	3317.8	61.4
0°-90°	3988.9	73.8
90°-120°	305.8	5.7
90°-150°	1049.3	19.4
90°-180°	1414.0	26.2
0°-180°	5403.0	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	5
95°	19	7	8	10	10	23
105°	103	105	107	110	97	108
115°	192	193	193	194	194	189
125°	270	271	271	272	272	241
135°	335	335	336	337	337	258
145°	386	387	387	388	388	241
155°	424	424	423	424	423	195
165°	447	445	445	448	445	126
175°	457	455	455	458	454	44
180°	457	457	457	457	457	

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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°	5.1	4.4	7.2	9.2	9.2
95°	18.8	7.2	7.5	9.6	9.9
97.5°	35.9	43.4	7.5	9.2	9.6
100°	56.1	62.2	15.0	9.2	9.6
102.5°	78.6	82.7	86.8	9.9	9.9
105°	102.9	104.9	106.6	109.7	97.4
107.5°	125.1	126.1	128.5	130.2	131.6
110°	147.7	148.7	150.7	151.4	152.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.5	171.6	172.3	171.9	173.3
115°	192.1	193.1	192.8	193.5	193.5
117.5°	212.3	213.6	214.6	214.3	214.3
120°	232.8	234.1	233.8	234.5	233.8
122.5°	251.9	252.6	253.3	253.6	252.9
125°	270.0	271.4	270.7	271.7	272.1
127.5°	287.4	287.8	289.5	289.2	288.8
130°	304.2	304.5	305.6	305.9	305.9
132.5°	319.6	320.3	321.6	322.0	321.6
135°	335.0	334.6	336.0	336.7	337.4
137.5°	348.6	348.6	350.3	351.0	350.7
140°	362.0	362.6	363.3	364.4	364.7
142.5°	373.9	375.3	375.6	376.3	376.3
145°	386.2	387.3	387.3	387.6	388.3
147.5°	395.8	397.8	397.5	397.8	398.2
150°	406.4	407.8	407.4	407.4	407.8
152.5°	415.3	416.3	415.6	416.3	416.0
155°	423.5	423.8	422.8	424.2	423.1
157.5°	430.7	430.7	429.3	431.0	429.3
160°	436.8	435.8	435.4	437.5	435.4
162.5°	442.3	440.9	440.6	442.6	440.2
165°	446.7	445.0	445.0	447.8	444.7
167.5°	450.5	448.8	448.4	451.5	448.1
170°	453.6	451.5	451.9	454.6	451.2
172.5°	455.6	453.6	453.9	456.6	452.9
175°	457.0	454.9	455.3	458.3	454.2
177.5°	458.0	455.6	456.3	459.0	454.9
180°	457.0	457.0	457.0	457.0	457.0

(END OF REPORT)