

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: P1026018

Luminaire Tested: S124RDIP-B1020D365UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026018
REPORT IS A COMBINATION OF REPORTS P998938 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-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

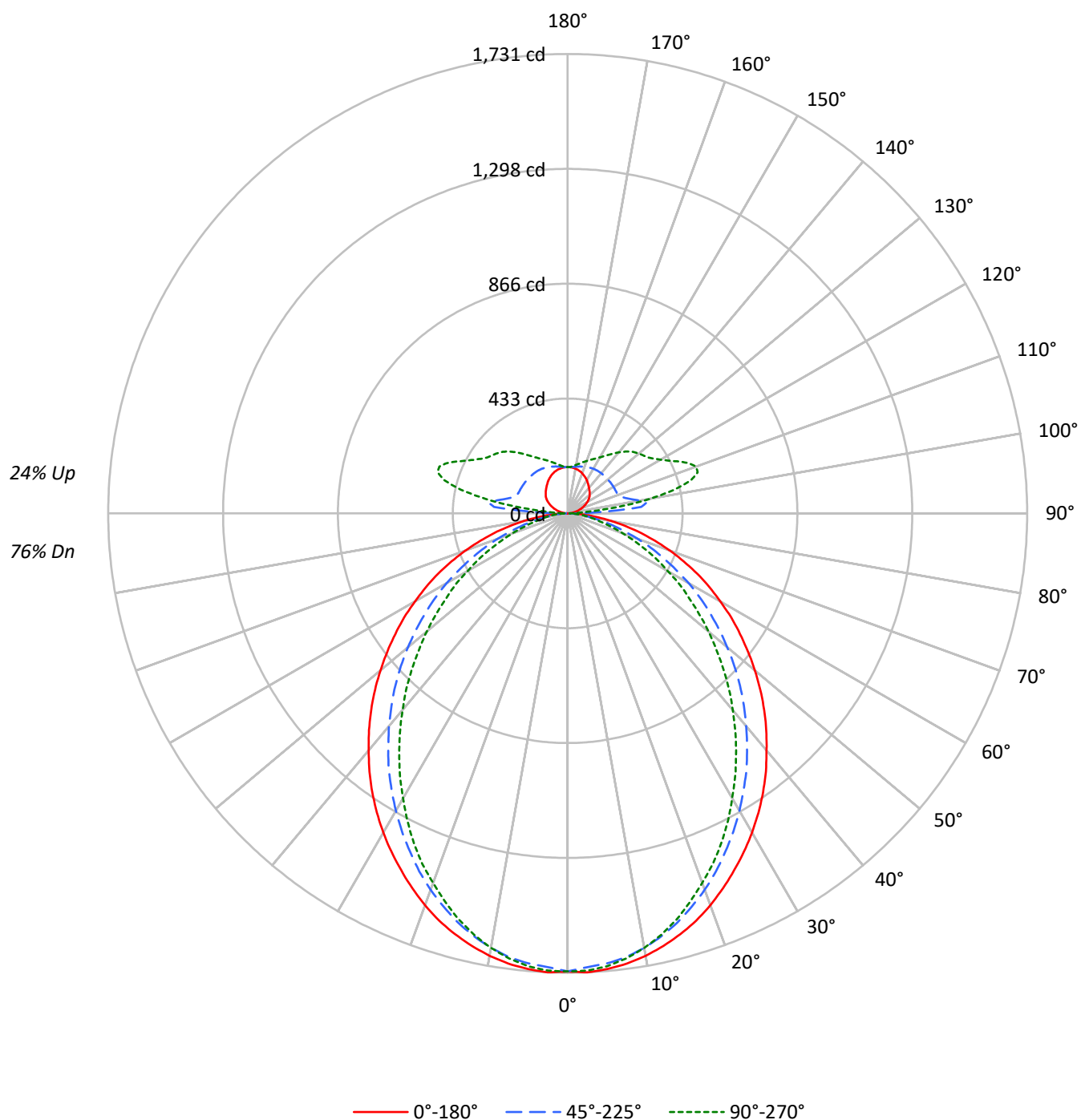
Lumens per Lamp: N/A
Luminaire Lumens: 5258.5 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	88	88	88	80	80	80
1	104	100	96	92	99	95	92	89	86	84	81	79	77	75	71	70	68
2	95	88	81	76	90	84	78	73	76	72	68	70	66	63	63	61	58
3	87	77	70	64	83	74	67	62	68	62	58	62	57	54	56	53	50
4	80	69	61	55	76	66	59	53	60	54	50	55	50	46	51	47	43
5	74	62	53	47	70	59	52	46	54	48	43	50	45	41	46	42	38
6	68	56	47	41	65	53	46	40	49	43	38	45	40	36	42	37	34
7	63	50	42	37	60	49	41	36	45	38	34	41	36	32	38	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	51	39	32	27	49	38	31	26	35	29	25	33	27	24	30	26	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	3.1
10°-20°	452.5	8.6
20°-30°	653.3	12.4
30°-40°	740.4	14.1
40°-50°	714.9	13.6
50°-60°	594.3	11.3
60°-70°	410.2	7.8
70°-80°	207.3	3.9
80°-90°	53.3	1.0
90°-100°	129.3	2.5
100°-110°	262.9	5.0
110°-120°	234.3	4.5
120°-130°	196.8	3.7
130°-140°	164.2	3.1
140°-150°	125.4	2.4
150°-160°	88.2	1.7
160°-170°	51.9	1.0
170°-180°	16.9	0.3
0°-30°	1268.1	24.1
0°-40°	2008.6	38.2
0°-60°	3317.8	63.1
0°-90°	3988.7	75.9
90°-120°	626.5	11.9
90°-150°	1113.0	21.2
90°-180°	1270.0	24.2
0°-180°	5258.5	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°	0	3	6	7	7	5
95°	11	36	279	138	83	12
105°	40	58	224	483	481	43
115°	70	88	200	384	462	70
125°	98	117	199	327	368	87
135°	117	139	197	290	330	90
145°	134	154	196	245	269	84
155°	153	165	191	216	225	70
165°	166	172	183	194	197	47
175°	174	174	175	178	177	16
180°	174	174	174	174	174	



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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°	0.3	2.7	6.2	6.8	7.2
92.5°	4.8	26.4	134.0	44.2	31.1
95°	11.3	35.6	278.6	138.0	83.4
97.5°	18.8	39.4	298.1	281.6	200.3
100°	26.0	44.4	274.9	389.8	313.5
102.5°	32.8	50.6	245.8	457.4	411.9
105°	40.0	58.0	224.3	482.9	481.0
107.5°	47.9	65.4	210.2	475.2	513.8
110°	55.7	73.0	203.7	447.8	514.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	63.2	80.5	200.7	414.3	494.3
115°	70.4	88.4	200.0	384.2	461.8
117.5°	77.9	95.7	199.6	360.6	430.1
120°	85.5	102.9	199.6	344.8	404.1
122.5°	92.3	109.9	199.3	334.4	383.6
125°	98.1	116.6	199.0	327.0	368.5
127.5°	103.6	122.7	198.3	320.0	358.9
130°	108.0	128.8	197.9	311.6	350.7
132.5°	112.5	133.8	197.6	301.6	341.5
135°	116.6	138.8	197.3	290.2	329.5
137.5°	120.7	143.0	197.3	278.0	315.5
140°	125.1	147.0	196.9	266.0	300.1
142.5°	129.9	150.6	196.9	254.8	283.7
145°	134.3	153.8	196.2	244.8	269.0
147.5°	139.5	156.9	195.2	236.4	255.4
150°	144.3	159.8	194.2	228.7	244.1
152.5°	148.7	162.6	192.5	222.2	233.8
155°	152.8	165.0	190.8	216.0	225.3
157.5°	156.9	167.1	189.0	210.2	217.4
160°	160.7	169.0	187.0	204.4	210.2
162.5°	164.1	170.6	184.9	198.8	203.4
165°	166.5	171.6	182.9	193.6	196.6
167.5°	169.2	172.4	180.8	189.2	191.1
170°	170.9	173.1	178.8	184.8	186.0
172.5°	172.6	173.6	176.7	180.8	180.8
175°	173.7	174.0	175.4	177.8	177.1
177.5°	174.3	174.0	174.3	175.6	174.3
180°	174.0	174.0	174.0	174.0	174.0

(END OF REPORT)