

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: P1026042

Luminaire Tested: S124RDIP-B1020D590UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026042
REPORT IS A COMBINATION OF REPORTS P998972 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D590UB40-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

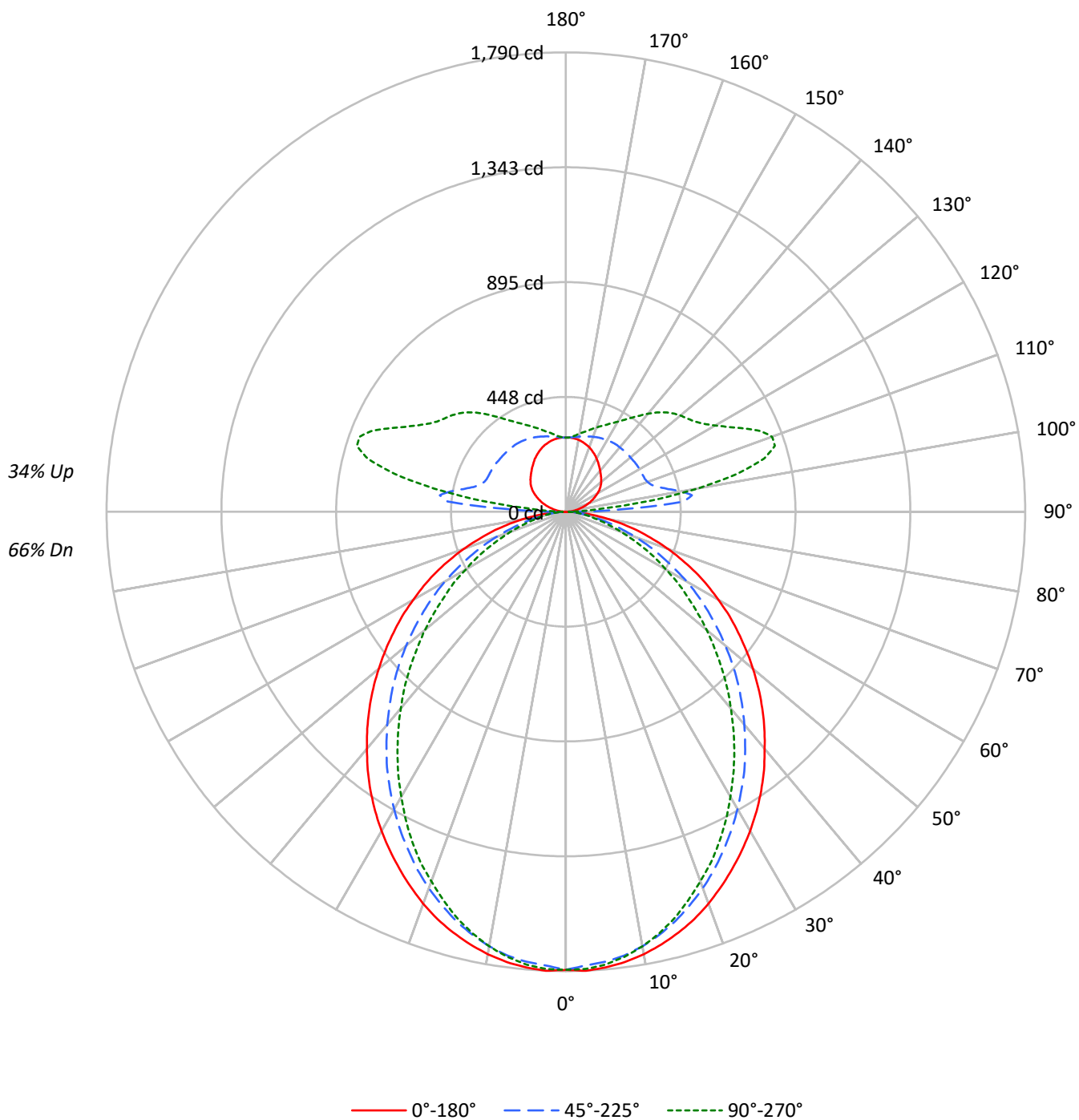
Lumens per Lamp: N/A
Luminaire Lumens: 6236.2 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 62.2
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66		
1	102	97	94	90	96	92	89	86	82	79	77	72	70	68	63	62	61	56		
2	93	86	79	74	87	81	75	71	72	68	64	64	61	58	56	54	52	48		
3	85	76	68	62	80	71	65	60	64	59	54	57	53	49	50	47	44	41		
4	78	67	59	53	73	64	56	51	57	51	47	51	46	43	45	41	38	35		
5	72	60	52	46	67	57	50	44	51	45	41	46	41	37	41	37	34	31		
6	66	54	46	40	62	51	44	39	46	40	36	41	37	33	37	33	30	27		
7	61	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27	24		
8	57	45	37	31	54	43	35	30	39	33	28	35	30	26	31	27	24	22		
9	53	41	33	28	50	39	32	27	35	30	25	32	27	24	29	25	22	20		
10	50	38	30	26	47	36	29	25	33	27	23	30	25	21	27	23	20	18		

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	2.7
10°-20°	467.9	7.5
20°-30°	675.6	10.8
30°-40°	765.7	12.3
40°-50°	739.3	11.9
50°-60°	614.6	9.9
60°-70°	424.2	6.8
70°-80°	214.4	3.4
80°-90°	55.5	0.9
90°-100°	214.9	3.4
100°-110°	437.0	7.0
110°-120°	389.5	6.2
120°-130°	327.2	5.2
130°-140°	273.1	4.4
140°-150°	208.5	3.3
150°-160°	146.6	2.4
160°-170°	86.2	1.4
170°-180°	28.0	0.4
0°-30°	1311.4	21.0
0°-40°	2077.1	33.3
0°-60°	3431.0	55.0
0°-90°	4125.1	66.1
90°-120°	1041.5	16.7
90°-150°	1850.3	29.7
90°-180°	2111.0	33.9
0°-180°	6236.2	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	4	10	11	12	6
95°	19	59	463	229	139	21
105°	66	96	373	803	800	71
115°	117	147	332	639	768	116
125°	163	194	331	544	613	145
135°	194	231	328	482	548	150
145°	223	256	326	407	447	140
155°	254	274	317	359	374	117
165°	277	285	304	322	327	78
175°	289	289	292	296	294	27
180°	289	289	289	289	289	

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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°	0.6	4.5	10.2	11.4	11.9
92.5°	8.0	43.8	222.8	73.6	51.7
95°	18.8	59.1	463.2	229.4	138.7
97.5°	31.3	65.4	495.6	468.3	333.0
100°	43.2	73.9	456.9	647.9	521.1
102.5°	54.6	84.1	408.6	760.4	684.8
105°	66.5	96.4	372.8	802.8	799.6
107.5°	79.6	108.8	349.5	790.0	854.2
110°	92.6	121.4	338.7	744.5	855.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	105.1	133.8	333.6	688.8	821.8
115°	117.1	146.9	332.5	638.8	767.8
117.5°	129.6	159.1	331.9	599.6	714.9
120°	142.1	171.0	331.9	573.2	671.8
122.5°	153.4	182.7	331.3	555.8	637.7
125°	163.1	193.8	330.8	543.6	612.6
127.5°	172.2	204.0	329.6	532.0	596.7
130°	179.6	214.0	329.1	518.0	583.1
132.5°	187.0	222.5	328.5	501.6	567.8
135°	193.8	230.7	327.9	482.5	547.9
137.5°	200.6	237.8	327.9	462.0	524.6
140°	208.0	244.4	327.4	442.2	499.0
142.5°	216.0	250.4	327.4	423.6	471.7
145°	223.3	255.8	326.2	407.0	447.3
147.5°	231.9	260.8	324.5	393.0	424.5
150°	239.8	265.7	322.8	380.2	405.8
152.5°	247.2	270.2	320.0	369.4	388.7
155°	254.0	274.2	317.1	359.2	374.5
157.5°	260.9	277.9	314.3	349.5	361.5
160°	267.1	281.0	310.9	339.8	349.5
162.5°	272.8	283.6	307.5	330.5	338.2
165°	276.8	285.3	304.1	322.0	326.8
167.5°	281.3	286.7	300.6	314.5	317.7
170°	284.2	287.8	297.2	307.2	309.2
172.5°	287.0	288.7	293.8	300.6	300.6
175°	288.7	289.3	291.5	295.5	294.4
177.5°	289.8	289.3	289.8	291.8	289.8
180°	289.3	289.3	289.3	289.3	289.3

(END OF REPORT)