

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: P1026078

Luminaire Tested: S124RDIP-B1020D810UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026078
REPORT IS A COMBINATION OF REPORTS P999018 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D810UB50-4F0-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

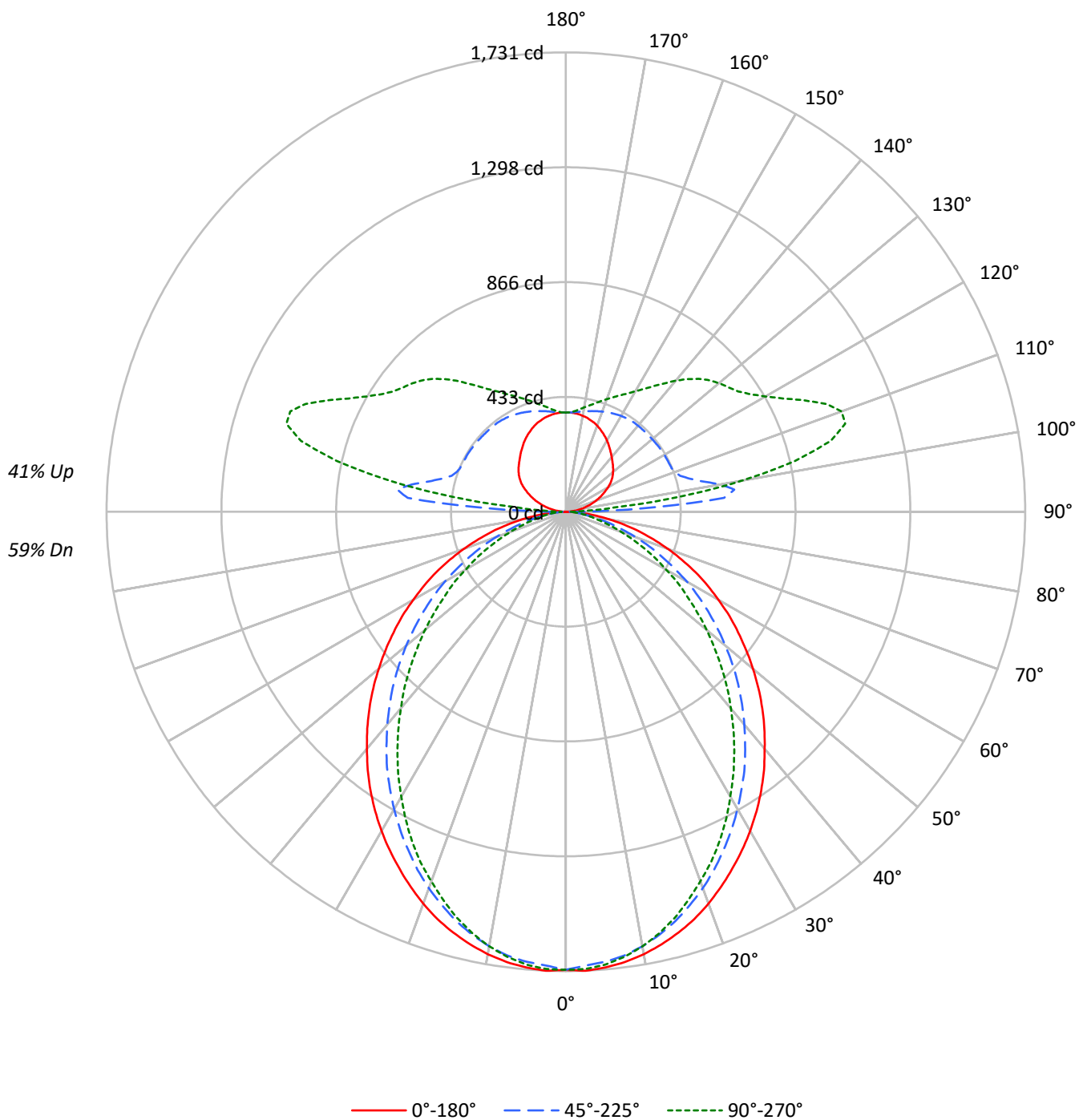
Lumens per Lamp: N/A
Luminaire Lumens: 6717.4 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.9
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65
1	100	96	92	89	93	90	86	83	78	76	74	68	66	64	58	57	55
2	92	84	78	73	85	79	74	69	69	65	61	60	57	54	51	49	47
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	46	43	40
4	77	66	58	52	71	62	55	50	54	49	45	47	43	40	41	38	35
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	34	31
6	65	53	45	39	61	50	43	37	44	38	34	39	34	31	34	30	27
7	60	48	40	34	56	45	38	33	40	34	30	35	31	27	31	27	24
8	56	44	36	31	52	41	34	29	37	31	27	32	28	24	28	25	22
9	52	40	33	27	49	38	31	26	34	28	24	30	25	22	26	23	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	24	21	18

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	2.4
10°-20°	452.5	6.7
20°-30°	653.3	9.7
30°-40°	740.4	11.0
40°-50°	714.9	10.6
50°-60°	594.3	8.8
60°-70°	410.2	6.1
70°-80°	207.3	3.1
80°-90°	54.1	0.8
90°-100°	277.7	4.1
100°-110°	564.7	8.4
110°-120°	503.4	7.5
120°-130°	422.8	6.3
130°-140°	352.9	5.3
140°-150°	269.5	4.0
150°-160°	189.4	2.8
160°-170°	111.4	1.7
170°-180°	36.2	0.5
0°-30°	1268.1	18.9
0°-40°	2008.6	29.9
0°-60°	3317.8	49.4
0°-90°	3989.4	59.4
90°-120°	1345.8	20.0
90°-150°	2390.9	35.6
90°-180°	2728.0	40.6
0°-180°	6717.4	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	6	13	15	15	6
95°	24	76	598	296	179	27
105°	86	124	482	1037	1033	92
115°	151	190	430	825	992	150
125°	211	250	427	702	792	188
135°	250	298	424	624	708	194
145°	289	330	422	526	578	181
155°	328	354	410	464	484	151
165°	358	369	393	416	422	101
175°	373	374	377	382	380	35
180°	374	374	374	374	374	

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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°	0.7	5.9	13.2	14.7	15.4
92.5°	10.3	56.6	287.9	95.1	66.8
95°	24.2	76.4	598.5	296.3	179.2
97.5°	40.4	84.4	640.4	605.2	430.4
100°	55.8	95.4	590.5	837.2	673.4
102.5°	70.5	108.7	528.0	982.6	884.9
105°	85.9	124.4	481.8	1037.4	1033.3
107.5°	102.8	140.6	451.7	1020.8	1103.8
110°	119.7	156.8	437.7	962.0	1105.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.9	173.0	431.1	890.1	1061.9
115°	151.3	189.9	429.6	825.4	992.2
117.5°	167.4	205.6	428.9	774.8	923.9
120°	183.6	221.0	428.9	740.7	868.1
122.5°	198.3	236.1	428.2	718.2	824.0
125°	210.8	250.4	427.4	702.4	791.7
127.5°	222.5	263.6	425.9	687.4	771.1
130°	232.1	276.5	425.2	669.4	753.5
132.5°	241.6	287.5	424.5	648.1	733.7
135°	250.4	298.2	423.7	623.5	708.0
137.5°	259.2	307.4	423.7	597.1	677.8
140°	268.8	315.8	423.0	571.3	644.8
142.5°	279.1	323.5	423.0	547.4	609.5
145°	288.6	330.5	421.5	525.8	578.0
147.5°	299.6	337.0	419.3	507.8	548.6
150°	309.9	343.4	417.1	491.3	524.4
152.5°	319.5	349.2	413.5	477.4	502.3
155°	328.3	354.4	409.8	464.1	484.0
157.5°	337.1	359.1	406.1	451.6	467.1
160°	345.2	363.2	401.7	439.2	451.7
162.5°	352.5	366.4	397.3	427.0	437.0
165°	357.7	368.7	392.9	416.0	422.3
167.5°	363.5	370.5	388.5	406.5	410.5
170°	367.2	372.0	384.1	396.9	399.5
172.5°	370.9	373.0	379.7	388.5	388.5
175°	373.1	373.8	376.7	381.9	380.4
177.5°	374.5	373.8	374.5	377.1	374.5
180°	373.8	373.8	373.8	373.8	373.8

(END OF REPORT)