

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: P1025467

Luminaire Tested: S124DIP-B350D810UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025467
REPORT IS A COMBINATION OF REPORTS P996007 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D810UB40-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

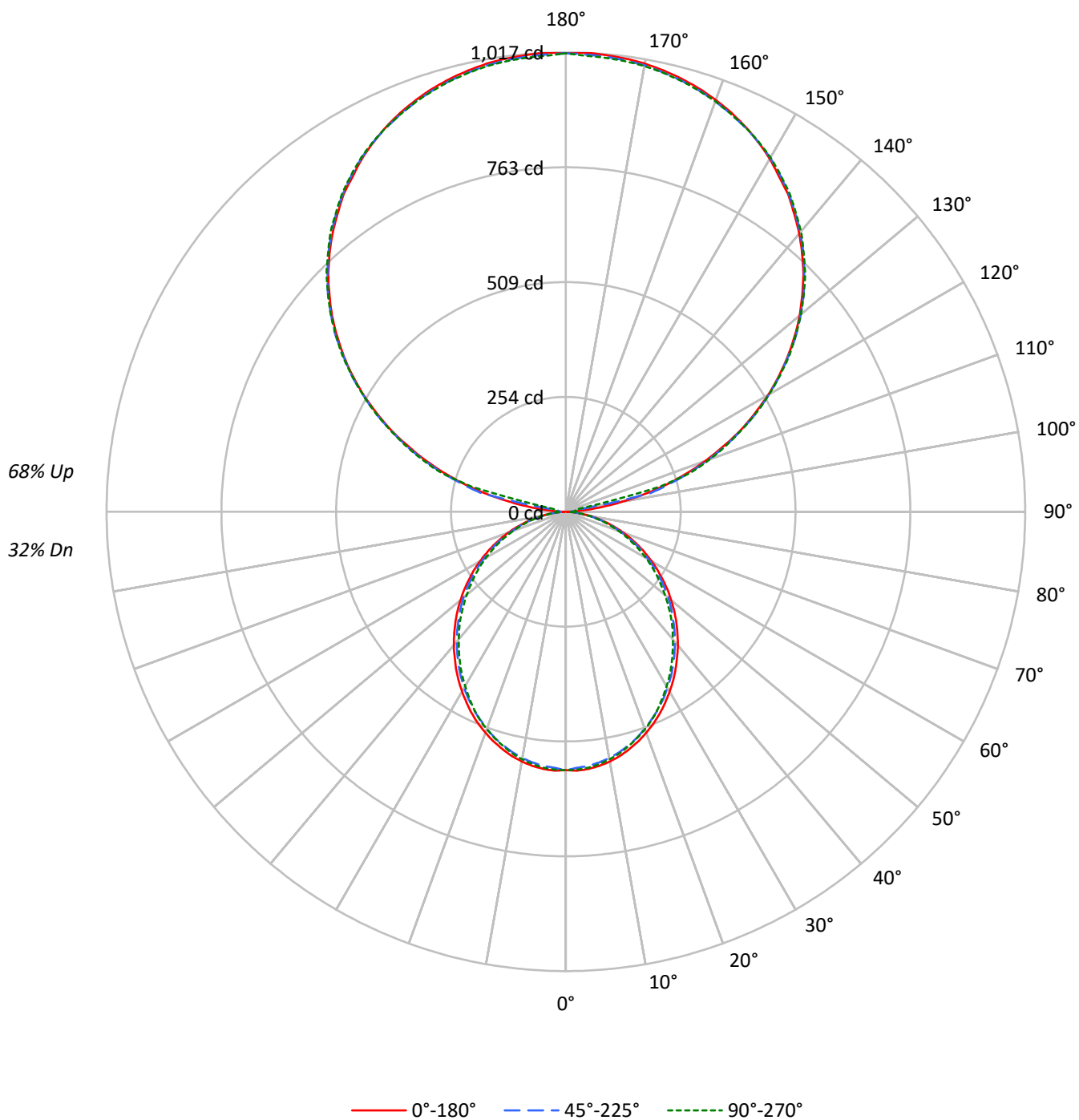
Lumens per Lamp: N/A
Luminaire Lumens: 4611.0 lumens
Efficiency: N/A
Efficacy: 135.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	39	39	39
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33
2	85	78	72	67	76	70	65	61	56	53	50	43	41	39	31	29	28
3	78	69	61	56	70	62	56	51	49	45	42	38	35	33	27	25	24
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14
8	51	39	32	27	46	36	29	25	29	24	20	23	19	16	17	14	12
9	48	36	28	24	43	33	26	22	26	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4664	4664	4664
5°	4668	4530	4535
10°	4628	4404	4373
15°	4562	4255	4191
20°	4477	4092	4001
25°	4382	3922	3797
30°	4267	3737	3573
35°	4147	3548	3357
40°	4023	3344	3127
45°	3893	3141	2912
50°	3749	2943	2674
55°	3592	2711	2437
60°	3431	2458	2191
65°	3249	2197	1913
70°	3036	1881	1616
75°	2720	1517	1294
80°	2320	1097	910
85°	1797	610	490

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3893 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	1.2
10°-20°	151.9	3.3
20°-30°	223.5	4.8
30°-40°	259.8	5.6
40°-50°	259.8	5.6
50°-60°	227.2	4.9
60°-70°	168.7	3.7
70°-80°	95.7	2.1
80°-90°	29.5	0.6
90°-100°	33.7	0.7
100°-110°	221.9	4.8
110°-120°	423.7	9.2
120°-130°	537.9	11.7
130°-140°	575.4	12.5
140°-150°	538.1	11.7
150°-160°	433.9	9.4
160°-170°	279.8	6.1
170°-180°	96.4	2.1
0°-30°	429.3	9.3
0°-40°	689.1	14.9
0°-60°	1176.2	25.5
0°-90°	1470.1	31.9
90°-120°	679.3	14.7
90°-150°	2330.7	50.5
90°-180°	3141.0	68.1
0°-180°	4611.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	572	572	572	572	572	
5°	572	570	565	570	569	54
15°	544	542	535	538	537	153
25°	493	490	483	484	482	227
35°	424	421	414	411	409	265
45°	346	343	336	330	329	267
55°	262	260	254	248	246	234
65°	177	175	170	166	164	176
75°	94	92	90	88	88	100
85°	25	25	24	24	23	27
90°	2	11	17	21	23	4
95°	42	16	17	21	22	51
105°	228	233	237	244	216	239
115°	427	429	428	430	430	420
125°	600	603	601	604	604	536
135°	744	743	746	748	749	573
145°	858	860	860	861	862	536
155°	941	941	939	942	940	434
165°	992	988	988	994	988	280
175°	1015	1010	1011	1018	1009	97
180°	1015	1015	1015	1015	1015	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	571.9	571.9	571.9	571.9	571.9
2.5°	573.8	572.4	567.4	571.9	571.5
5°	571.5	569.7	564.6	569.7	568.7
7.5°	567.4	565.5	560.0	564.2	563.7
10°	561.4	559.6	553.6	557.3	556.4
12.5°	553.6	551.8	545.4	549.5	548.1
15°	544.0	542.2	535.3	538.0	536.7
17.5°	533.0	530.7	524.3	526.1	525.2
20°	520.6	518.3	511.4	512.8	511.9
22.5°	507.3	504.1	497.2	500.0	498.2
25°	492.7	489.5	483.0	483.5	481.7
27.5°	476.2	473.0	467.0	466.1	463.8
30°	459.7	456.0	450.0	448.2	445.9
32.5°	442.2	439.0	432.6	430.3	428.0
35°	423.9	420.7	414.3	411.1	408.8
37.5°	404.7	401.9	395.0	391.8	388.6
40°	385.9	382.2	375.3	370.8	368.5
42.5°	365.7	363.9	356.1	350.6	349.2
45°	346.0	342.8	335.5	330.4	329.0
47.5°	325.4	323.1	316.2	310.7	307.1
50°	304.3	302.5	296.1	289.6	286.9
52.5°	283.7	281.4	274.5	269.0	265.3
55°	261.7	260.3	253.9	248.4	245.6
57.5°	241.1	239.7	233.3	227.8	225.0
60°	219.5	217.2	211.3	207.1	204.9
62.5°	198.4	196.6	190.2	186.5	184.2
65°	177.4	175.1	170.5	165.9	163.6
67.5°	155.8	154.0	149.4	144.8	144.4
70°	136.1	132.9	129.2	125.6	124.2
72.5°	115.0	111.8	109.1	106.3	104.9
75°	94.4	92.1	89.8	88.0	87.5
77.5°	74.2	73.3	71.0	70.6	69.2
80°	56.4	55.0	54.1	53.2	52.7
82.5°	39.0	38.5	38.5	38.0	37.6
85°	24.7	24.7	23.8	23.8	23.4
87.5°	11.9	11.5	11.0	11.0	11.0
90°	2.3	10.6	16.7	21.3	22.8
92.5°	11.4	9.9	15.9	20.5	20.5
95°	41.8	15.9	16.7	21.3	22.0
97.5°	79.7	96.4	16.7	20.5	21.3
100°	124.5	138.2	33.4	20.5	21.3
102.5°	174.6	183.7	192.8	22.0	22.0
105°	228.5	233.1	236.9	243.7	216.4
107.5°	277.9	280.1	285.5	289.3	292.3
110°	328.0	330.2	334.8	336.3	338.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	376.6	381.1	382.6	381.9	384.9
115°	426.7	428.9	428.2	429.7	429.7
117.5°	471.5	474.5	476.8	476.0	476.0
120°	517.0	520.0	519.3	520.8	519.3
122.5°	559.5	561.0	562.6	563.3	561.8
125°	599.8	602.8	601.3	603.6	604.3
127.5°	638.5	639.2	643.0	642.3	641.5
130°	675.7	676.4	678.7	679.5	679.5
132.5°	709.8	711.4	714.4	715.2	714.4
135°	744.0	743.3	746.3	747.8	749.3
137.5°	774.4	774.4	778.2	779.7	778.9
140°	804.0	805.5	807.0	809.3	810.1
142.5°	830.6	833.6	834.4	835.9	835.9
145°	857.9	860.2	860.2	860.9	862.4
147.5°	879.1	883.7	882.9	883.7	884.5
150°	902.7	905.7	905.0	905.0	905.7
152.5°	922.4	924.7	923.2	924.7	923.9
155°	940.6	941.4	939.1	942.2	939.9
157.5°	956.6	956.6	953.5	957.3	953.5
160°	970.3	968.0	967.2	971.8	967.2
162.5°	982.4	979.4	978.6	983.2	977.8
165°	992.3	988.5	988.5	994.5	987.7
167.5°	1000.6	996.8	996.1	1002.9	995.3
170°	1007.5	1002.9	1003.7	1009.7	1002.1
172.5°	1012.0	1007.5	1008.2	1014.3	1005.9
175°	1015.0	1010.5	1011.2	1018.1	1009.0
177.5°	1017.3	1012.0	1013.5	1019.6	1010.5
180°	1015.0	1015.0	1015.0	1015.0	1015.0

(END OF REPORT)