

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: P1025439

Luminaire Tested: S124DIP-B350D810UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025439
REPORT IS A COMBINATION OF REPORTS P995964 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D810UB27-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

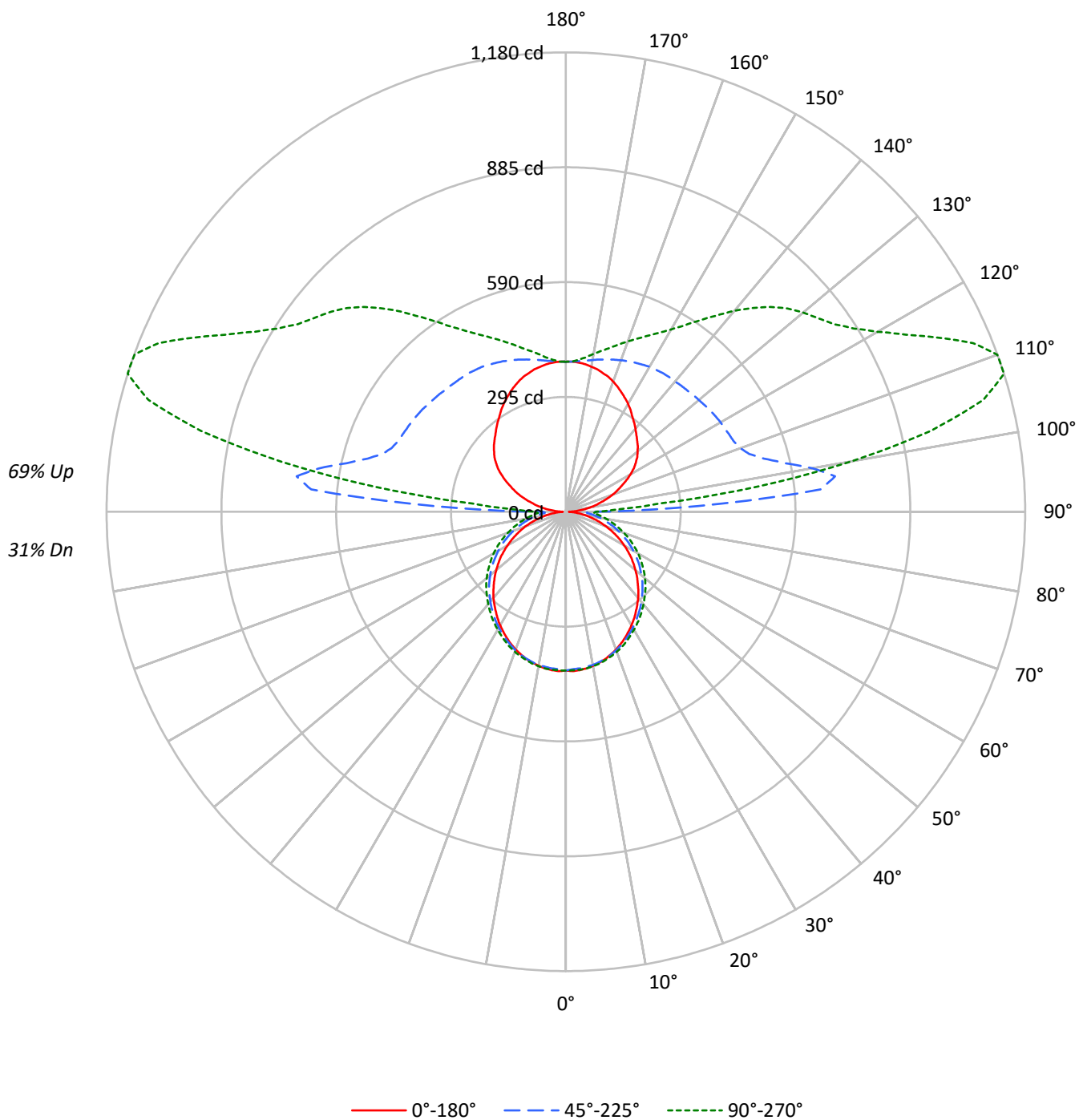
Lumens per Lamp: N/A
Luminaire Lumens: 4204.7 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	92	92	92	92	73	73	73	55	55	55	38	38	38
1	93	88	84	81	83	79	76	73	63	60	58	47	46	44	33	32	31
2	84	77	71	65	75	69	64	59	54	51	48	41	38	36	29	27	26
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	25	23	22
4	70	59	51	45	62	53	47	41	42	37	33	32	28	26	22	20	18
5	64	53	44	39	57	47	40	35	38	32	29	28	25	22	20	18	16
6	59	47	39	33	52	42	35	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	48	38	31	26	30	25	22	23	20	17	16	14	12
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11
9	47	35	27	22	42	31	25	20	25	20	17	19	16	13	14	11	10
10	43	32	25	20	39	29	22	18	23	18	15	18	14	12	13	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3327	3327	3327
5°	3336	3240	3246
10°	3314	3176	3168
15°	3283	3105	3079
20°	3238	3027	2993
25°	3186	2942	2900
30°	3130	2857	2805
35°	3066	2770	2720
40°	3015	2687	2633
45°	2940	2609	2555
50°	2877	2520	2474
55°	2810	2435	2380
60°	2707	2328	2292
65°	2593	2214	2186
70°	2456	2082	2062
75°	2265	1937	1946
80°	2048	1789	1822
85°	1761	1640	1723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2940 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.9
10°-20°	110.8	2.6
20°-30°	167.5	4.0
30°-40°	202.6	4.8
40°-50°	214.2	5.1
50°-60°	201.6	4.8
60°-70°	167.3	4.0
70°-80°	117.4	2.8
80°-90°	67.7	1.6
90°-100°	325.6	7.7
100°-110°	611.3	14.5
110°-120°	538.5	12.8
120°-130°	446.9	10.6
130°-140°	368.5	8.8
140°-150°	278.7	6.6
150°-160°	195.3	4.6
160°-170°	114.8	2.7
170°-180°	37.3	0.9
0°-30°	316.9	7.5
0°-40°	519.5	12.4
0°-60°	935.3	22.2
0°-90°	1287.6	30.6
90°-120°	1475.5	35.1
90°-150°	2569.6	61.1
90°-180°	2917.0	69.4
0°-180°	4204.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	408	407	404	408	407	39
15°	392	392	391	395	394	110
25°	358	361	362	367	368	165
35°	313	319	324	330	331	196
45°	261	270	279	286	289	202
55°	205	214	228	237	240	182
65°	142	156	172	183	187	140
75°	79	96	115	128	132	84
85°	24	43	64	78	82	25
90°	8	32	59	74	78	7
95°	31	100	657	358	241	32
105°	93	142	527	1111	1110	99
115°	159	203	464	882	1058	158
125°	219	260	453	746	840	195
135°	259	308	441	654	744	200
145°	298	341	434	545	600	187
155°	338	365	422	478	499	156
165°	369	380	405	429	435	104
175°	385	385	388	394	392	37
180°	385	385	385	385	385	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	408.0	408.0	408.0	408.0	408.0
2.5°	409.8	408.4	404.8	408.0	407.5
5°	408.4	407.1	403.9	407.5	407.1
7.5°	405.7	404.8	402.0	406.2	405.7
10°	402.0	401.6	399.3	403.4	403.0
12.5°	397.0	397.0	395.7	399.3	399.3
15°	391.5	392.0	390.6	394.7	394.3
17.5°	384.2	385.6	385.1	389.3	388.8
20°	376.5	377.8	378.3	382.9	382.9
22.5°	367.8	369.6	370.5	375.1	376.0
25°	358.2	360.9	362.3	367.3	367.8
27.5°	347.7	351.8	353.6	358.2	358.6
30°	337.2	340.8	344.0	349.1	350.0
32.5°	325.8	330.3	334.0	339.9	340.8
35°	313.4	318.9	323.5	329.9	331.2
37.5°	301.1	307.5	313.0	319.4	320.7
40°	289.2	295.1	301.5	308.4	310.2
42.5°	275.5	282.3	290.1	297.9	299.3
45°	261.3	270.0	278.7	286.5	288.7
47.5°	248.1	256.8	266.8	274.6	277.3
50°	233.5	243.5	253.6	262.7	265.4
52.5°	218.8	228.9	240.8	249.9	252.7
55°	204.7	214.3	228.0	237.1	239.9
57.5°	188.7	200.6	213.8	224.8	227.1
60°	173.2	185.0	200.1	210.6	214.3
62.5°	158.1	171.3	186.4	196.9	200.6
65°	141.6	156.3	171.8	183.2	186.9
67.5°	126.1	141.6	158.1	169.5	173.2
70°	110.1	125.6	143.0	155.3	158.5
72.5°	94.6	110.6	129.3	141.2	144.8
75°	78.6	95.5	114.7	127.5	131.6
77.5°	63.5	81.3	101.4	114.2	118.8
80°	49.8	68.1	88.2	101.9	105.5
82.5°	36.1	55.3	75.4	89.5	93.7
85°	24.2	43.4	64.0	77.7	82.2
87.5°	15.1	33.8	53.9	67.2	71.3
90°	8.1	31.7	58.8	73.6	78.0
92.5°	17.5	81.1	339.3	153.4	127.8
95°	30.9	99.7	656.7	357.6	240.9
97.5°	47.1	105.8	697.6	673.1	497.1
100°	62.5	115.3	643.4	910.1	744.5
102.5°	77.7	127.2	576.7	1057.2	960.2
105°	92.7	141.5	526.8	1110.9	1110.4
107.5°	110.1	156.9	493.5	1091.6	1180.3
110°	127.1	171.7	477.2	1028.2	1179.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	143.3	187.0	468.2	951.4	1132.2
115°	158.7	202.6	464.4	882.4	1057.5
117.5°	175.3	217.5	461.3	827.5	984.8
120°	191.6	231.6	459.0	789.5	924.5
122.5°	206.7	245.7	456.0	764.2	876.4
125°	219.1	259.5	453.4	745.6	840.3
127.5°	231.2	273.2	449.6	727.3	816.8
130°	240.6	285.9	446.5	706.4	795.9
132.5°	250.5	297.3	444.0	682.3	773.2
135°	259.1	308.2	440.9	654.2	744.0
137.5°	268.1	317.4	439.1	624.6	710.1
140°	278.0	326.0	437.0	595.9	673.8
142.5°	288.2	334.0	436.1	569.4	635.2
145°	298.0	340.6	434.5	544.7	600.4
147.5°	309.4	347.5	432.3	524.0	567.8
150°	320.0	353.9	430.0	506.4	540.5
152.5°	329.3	360.0	426.2	492.1	517.8
155°	338.4	365.3	422.4	478.4	498.9
157.5°	347.5	370.2	418.6	465.6	481.5
160°	355.8	374.4	414.1	452.7	465.6
162.5°	363.4	377.8	409.6	440.2	450.4
165°	368.7	380.0	405.0	428.9	435.3
167.5°	374.7	381.9	400.5	419.0	423.2
170°	378.5	383.5	395.9	409.2	411.8
172.5°	382.3	384.6	391.4	400.4	400.5
175°	384.6	385.3	388.4	393.7	392.1
177.5°	386.1	385.3	386.1	388.8	386.1
180°	385.3	385.3	385.3	385.3	385.3

(END OF REPORT)