

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: P1024934

Luminaire Tested: S124DIP-B1020D365UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024934
REPORT IS A COMBINATION OF REPORTS P995294 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB50-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

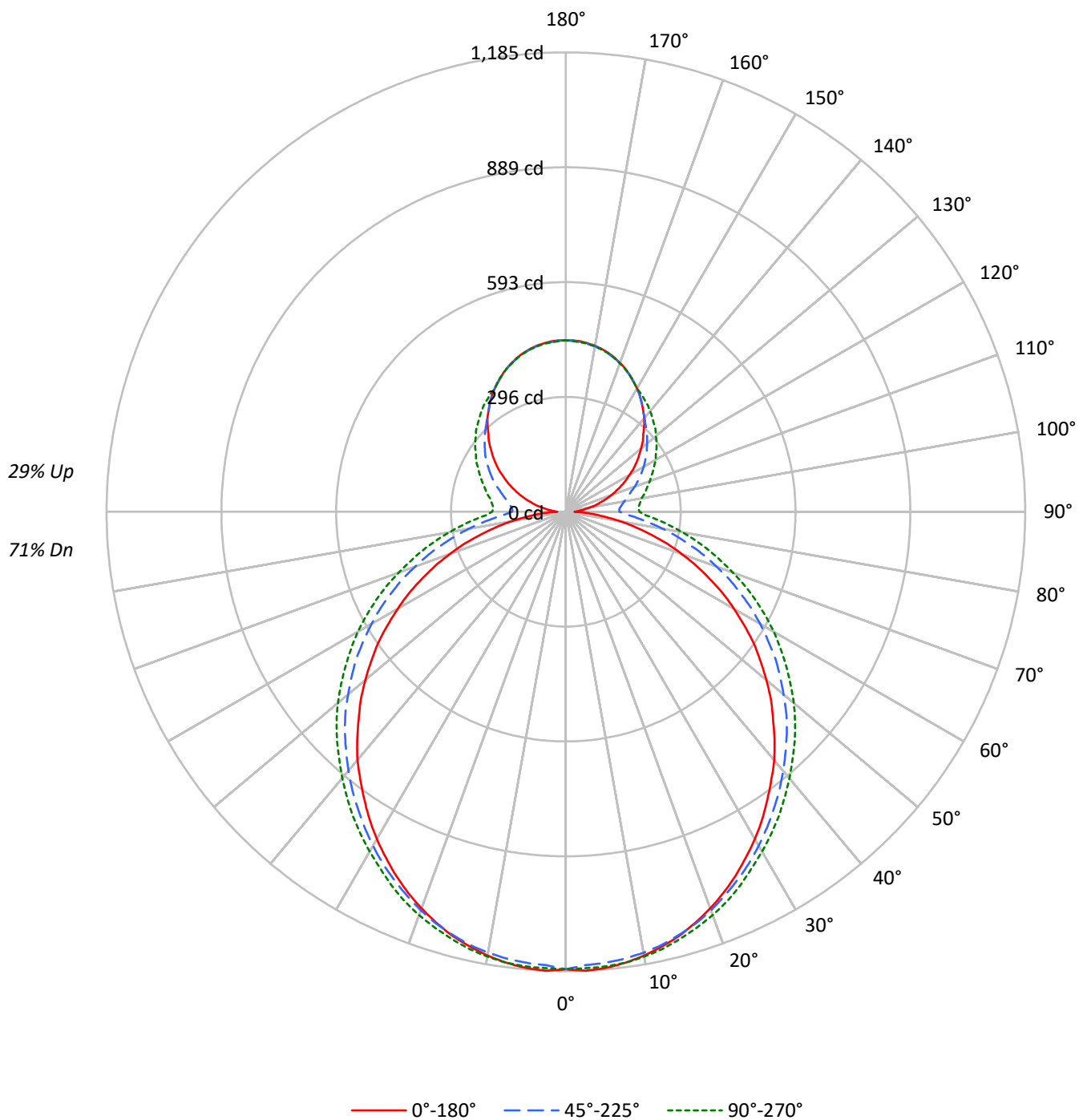
Lumens per Lamp: N/A
Luminaire Lumens: 5250.0 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71		
1	101	96	91	87	95	91	87	83	81	78	75	72	70	68	64	63	61	57		
2	91	83	76	70	86	79	72	67	70	65	61	63	59	55	56	53	50	46		
3	83	72	64	58	78	69	61	55	62	56	51	55	50	46	49	45	42	39		
4	76	64	55	49	71	61	53	47	54	48	43	49	44	39	43	39	36	33		
5	70	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	28		
6	64	51	42	36	60	48	40	35	44	37	32	39	34	30	35	31	27	24		
7	59	46	37	31	56	44	36	30	40	33	28	36	30	26	32	27	24	21		
8	55	42	34	28	52	40	32	27	36	30	25	33	27	23	29	25	21	19		
9	51	38	30	25	48	36	29	24	33	27	22	30	25	21	27	23	19	17		
10	48	35	27	22	45	34	26	22	31	24	20	28	23	19	25	21	17	16		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9622	9622	9622
5°	9649	9371	9388
10°	9586	9187	9160
15°	9496	8980	8904
20°	9363	8755	8654
25°	9213	8507	8386
30°	9052	8262	8112
35°	8868	8012	7867
40°	8720	7771	7614
45°	8503	7545	7391
50°	8318	7289	7155
55°	8126	7042	6883
60°	7829	6734	6628
65°	7501	6402	6320
70°	7103	6023	5965
75°	6550	5602	5627
80°	5923	5172	5272
85°	5094	4741	4985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	2.1
10°-20°	320.3	6.1
20°-30°	484.4	9.2
30°-40°	586.0	11.2
40°-50°	619.5	11.8
50°-60°	583.0	11.1
60°-70°	483.8	9.2
70°-80°	339.5	6.5
80°-90°	192.3	3.7
90°-100°	142.8	2.7
100°-110°	170.6	3.3
110°-120°	203.2	3.9
120°-130°	225.2	4.3
130°-140°	230.9	4.4
140°-150°	216.1	4.1
150°-160°	179.5	3.4
160°-170°	119.4	2.3
170°-180°	41.8	0.8
0°-30°	916.5	17.5
0°-40°	1502.5	28.6
0°-60°	2705.0	51.5
0°-90°	3720.6	70.9
90°-120°	516.6	9.8
90°-150°	1188.7	22.6
90°-180°	1529.0	29.1
0°-180°	5250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1181	1177	1168	1179	1177	112
15°	1132	1134	1130	1142	1140	319
25°	1036	1044	1048	1062	1064	477
35°	906	922	936	954	958	568
45°	756	781	806	828	835	584
55°	592	620	659	686	694	528
65°	410	452	497	530	540	406
75°	227	276	332	369	381	241
85°	70	126	185	225	238	73
90°	22	79	138	179	190	16
95°	38	84	141	178	190	36
105°	92	118	168	203	214	98
115°	157	169	210	239	248	155
125°	222	221	254	278	285	199
135°	282	284	294	314	321	219
145°	341	341	342	349	354	214
155°	390	390	389	391	389	179
165°	424	423	422	424	423	120
175°	441	440	439	442	439	42
180°	442	442	442	442	442	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.0	1180.0	1180.0	1180.0	1180.0
2.5°	1185.3	1181.3	1170.7	1180.0	1178.6
5°	1181.3	1177.3	1168.1	1178.6	1177.3
7.5°	1173.4	1170.7	1162.8	1174.7	1173.4
10°	1162.8	1161.5	1154.9	1166.8	1165.4
12.5°	1148.3	1148.3	1144.3	1154.9	1154.9
15°	1132.4	1133.7	1129.8	1141.7	1140.3
17.5°	1111.3	1115.2	1113.9	1125.8	1124.5
20°	1088.8	1092.8	1094.1	1107.3	1107.3
22.5°	1063.7	1069.0	1071.6	1084.8	1087.5
25°	1035.9	1043.9	1047.8	1062.4	1063.7
27.5°	1005.6	1017.4	1022.7	1035.9	1037.3
30°	975.2	985.7	995.0	1009.5	1012.2
32.5°	942.1	955.3	965.9	983.1	985.7
35°	906.4	922.3	935.5	954.0	958.0
37.5°	870.8	889.3	905.1	923.6	927.6
40°	836.4	853.6	872.1	891.9	897.2
42.5°	796.8	816.6	839.1	861.5	865.5
45°	755.8	780.9	806.0	828.5	835.1
47.5°	717.5	742.6	771.7	794.1	802.1
50°	675.2	704.3	733.4	759.8	767.7
52.5°	632.9	662.0	696.4	722.8	730.7
55°	592.0	619.7	659.4	685.8	693.7
57.5°	545.7	580.1	618.4	650.1	656.7
60°	500.8	535.1	578.8	609.1	619.7
62.5°	457.2	495.5	539.1	569.5	580.1
65°	409.6	451.9	496.8	529.9	540.4
67.5°	364.7	409.6	457.2	490.2	500.8
70°	318.4	363.4	413.6	449.3	458.5
72.5°	273.5	319.8	373.9	408.3	418.9
75°	227.3	276.2	331.7	368.7	380.6
77.5°	183.7	235.2	293.3	330.3	343.6
80°	144.0	196.9	255.0	294.7	305.2
82.5°	104.4	159.9	218.0	259.0	270.9
85°	70.0	125.5	185.0	224.6	237.8
87.5°	43.6	97.8	155.9	194.2	206.1
90°	22.1	78.8	138.3	178.7	190.0
92.5°	28.7	79.4	137.9	176.0	186.9
95°	37.7	84.4	141.0	177.6	189.5
97.5°	48.7	89.7	146.7	182.3	194.2
100°	62.3	98.1	152.7	189.1	198.3
102.5°	78.1	107.5	160.4	195.9	206.7
105°	91.5	118.3	168.5	202.6	214.2
107.5°	108.3	131.1	177.7	212.0	221.0
110°	124.1	143.2	189.1	218.8	230.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	140.4	156.3	199.2	228.3	238.9
115°	156.9	168.8	210.4	239.2	248.0
117.5°	173.6	181.6	220.9	247.6	257.2
120°	189.1	194.5	231.7	256.4	267.7
122.5°	206.5	206.9	242.2	267.6	275.2
125°	222.3	221.0	253.7	278.1	285.3
127.5°	237.7	237.4	263.1	286.2	295.1
130°	252.8	252.4	273.6	296.7	303.3
132.5°	269.5	268.8	284.4	306.2	313.8
135°	282.5	284.5	293.8	314.3	321.2
137.5°	298.6	298.3	304.3	323.0	330.0
140°	314.6	314.0	315.3	332.2	338.4
142.5°	328.0	328.7	327.1	341.6	346.9
145°	341.3	341.4	341.7	349.3	353.6
147.5°	355.0	355.4	355.1	356.0	361.0
150°	367.3	367.4	367.4	367.4	367.0
152.5°	377.6	378.3	378.7	379.7	378.7
155°	389.6	389.6	389.3	390.6	389.3
157.5°	399.8	399.2	399.2	400.2	399.2
160°	408.7	408.4	408.0	409.1	407.4
162.5°	416.9	415.9	415.6	417.6	415.9
165°	424.1	423.1	422.4	424.5	423.1
167.5°	429.9	428.6	428.6	430.6	428.6
170°	434.7	433.0	433.3	435.4	433.0
172.5°	438.1	436.8	436.8	439.1	436.8
175°	441.2	439.5	439.1	441.5	439.1
177.5°	442.6	440.9	440.9	443.2	440.5
180°	441.9	441.9	441.9	441.9	441.9

(END OF REPORT)