

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: P1031363

Luminaire Tested: S123DIW-B1000D460UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031363
REPORT IS A COMBINATION OF REPORTS P990760 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D460UB35-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

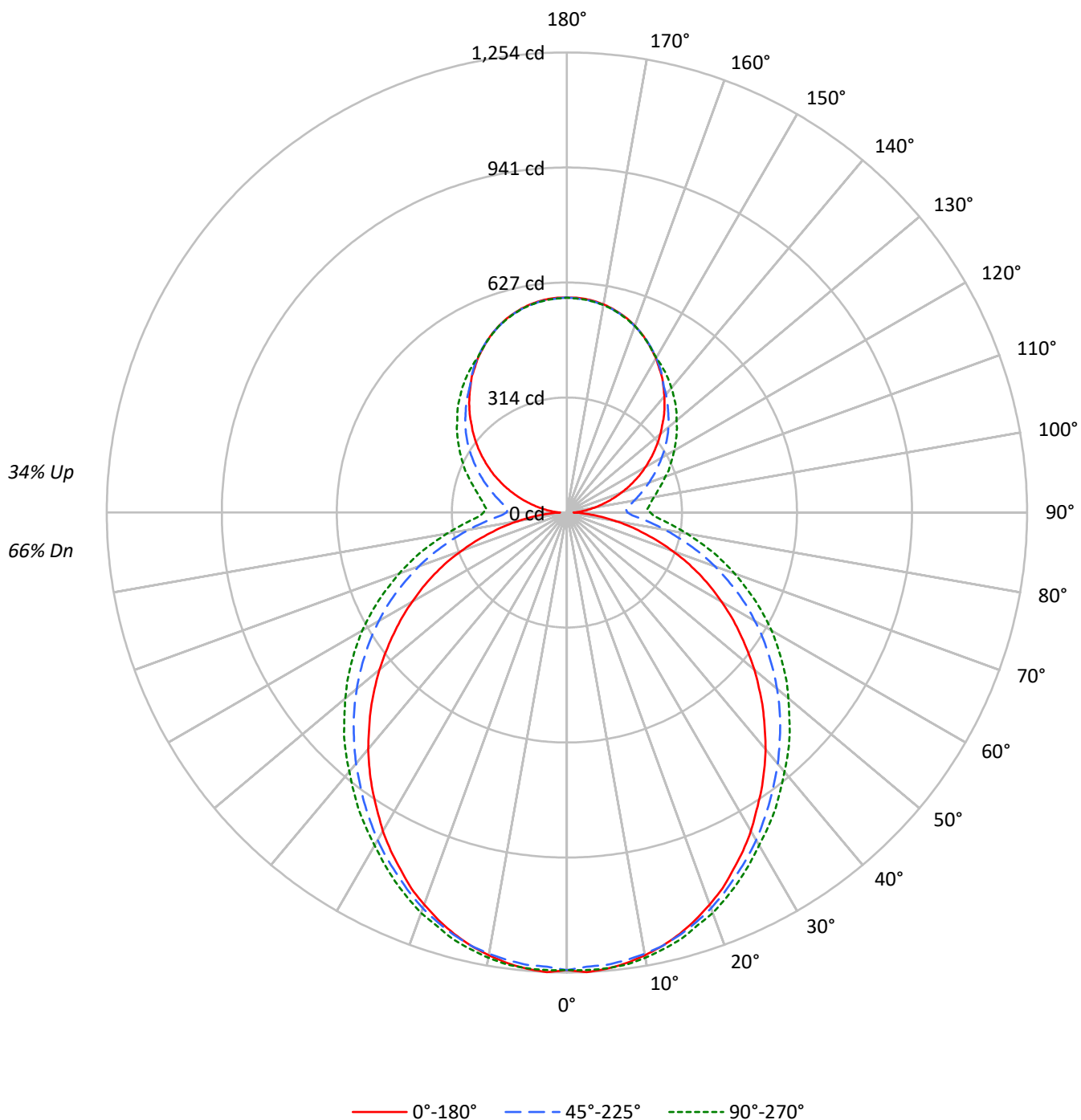
Lumens per Lamp: N/A
Luminaire Lumens: 5816.0 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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

TEST NUMBER: P1031363

CATALOG NUMBER: S123DIW-B1000D460UB35-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1031363

CATALOG NUMBER: S123DIW-B1000D460UB35-4F0-XX-W2A-D1

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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71
1	100	95	90	86	94	89	85	82	79	76	73	69	67	65	60	59	57
2	91	82	75	69	85	77	71	66	68	64	59	60	56	53	52	50	47
3	82	72	64	57	77	68	60	55	60	54	49	53	48	44	46	42	39
4	75	63	55	48	70	60	52	46	53	47	42	47	42	38	41	37	34
5	69	56	48	41	64	53	45	39	47	41	36	42	37	32	37	33	29
6	63	51	42	36	59	48	40	34	43	36	31	38	32	28	33	29	26
7	59	46	37	31	55	43	35	30	39	32	27	34	29	25	30	26	23
8	54	41	33	28	51	39	32	27	35	29	24	31	26	22	28	23	20
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	26	21	18
10	47	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13426	13426	13426
5°	13463	13032	13021
10°	13337	12679	12583
15°	13160	12289	12116
20°	12910	11855	11616
25°	12602	11366	11098
30°	12287	10923	10578
35°	11931	10459	10154
40°	11594	10033	9706
45°	11220	9621	9337
50°	10848	9214	8937
55°	10439	8796	8568
60°	10037	8369	8190
65°	9624	7913	7749
70°	9003	7402	7293
75°	8217	6818	6823
80°	7302	6228	6287
85°	6397	5750	5902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11220 cd/sqm

TEST NUMBER: P1031363

CATALOG NUMBER: S123DIW-B1000D460UB35-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	2.0
10°-20°	337.3	5.8
20°-30°	504.4	8.7
30°-40°	602.3	10.4
40°-50°	630.1	10.8
50°-60°	591.3	10.2
60°-70°	493.9	8.5
70°-80°	353.2	6.1
80°-90°	211.4	3.6
90°-100°	169.7	2.9
100°-110°	211.2	3.6
110°-120°	259.1	4.5
120°-130°	292.6	5.0
130°-140°	303.9	5.2
140°-150°	285.9	4.9
150°-160°	237.8	4.1
160°-170°	158.3	2.7
170°-180°	55.4	1.0
0°-30°	960.1	16.5
0°-40°	1562.3	26.9
0°-60°	2783.8	47.9
0°-90°	3842.2	66.1
90°-120°	640.0	11.0
90°-150°	1522.3	26.2
90°-180°	1974.0	33.9
0°-180°	5816.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1249	1246	1238	1249	1247	118
15°	1189	1193	1192	1205	1204	335
25°	1073	1087	1091	1109	1109	495
35°	924	946	963	984	989	578
45°	756	788	822	848	859	583
55°	576	621	670	706	717	516
65°	398	451	511	552	565	394
75°	216	280	348	393	409	231
85°	67	134	206	253	266	69
90°	18	89	164	213	227	15
95°	42	98	168	212	226	42
105°	114	148	210	249	262	122
115°	202	220	268	301	312	201
125°	290	292	330	357	364	259
135°	374	375	390	412	418	288
145°	452	451	453	463	467	282
155°	516	516	516	518	515	237
165°	562	560	560	563	560	158
175°	584	582	582	585	582	56
180°	586	586	586	586	586	



TEST NUMBER: P1031363

CATALOG NUMBER: S123DIW-B1000D460UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.3	1247.3	1247.3	1247.3	1247.3
2.5°	1254.1	1250.0	1239.2	1250.0	1248.7
5°	1248.7	1246.0	1237.8	1248.7	1247.3
7.5°	1239.2	1239.2	1231.0	1244.6	1243.3
10°	1225.6	1228.3	1221.5	1235.1	1232.4
12.5°	1209.3	1213.4	1209.3	1221.5	1218.8
15°	1188.9	1193.0	1191.6	1205.2	1203.8
17.5°	1164.4	1172.6	1171.2	1183.5	1180.7
20°	1137.3	1145.4	1148.1	1160.4	1161.7
22.5°	1108.7	1116.9	1121.0	1137.3	1135.9
25°	1073.4	1087.0	1091.1	1108.7	1108.7
27.5°	1039.4	1054.4	1062.5	1077.5	1078.8
30°	1002.8	1020.4	1031.3	1047.6	1047.6
32.5°	962.0	982.4	997.3	1015.0	1019.1
35°	923.9	945.7	963.4	983.7	989.2
37.5°	883.2	907.6	928.0	951.1	955.2
40°	842.4	866.9	894.1	917.2	922.6
42.5°	797.6	828.8	857.4	883.2	891.3
45°	755.5	788.1	822.0	847.9	858.7
47.5°	710.6	747.3	785.4	813.9	822.0
50°	667.1	705.2	747.3	778.6	788.1
52.5°	620.9	661.7	709.3	741.9	754.1
55°	576.1	620.9	669.9	706.5	717.4
57.5°	532.6	578.8	631.8	668.5	680.7
60°	486.4	535.3	591.1	629.1	644.0
62.5°	443.0	493.2	553.0	591.1	604.6
65°	398.1	451.1	510.9	551.7	565.2
67.5°	353.3	409.0	468.8	513.6	524.5
70°	305.7	364.1	429.4	472.8	486.4
72.5°	262.2	320.7	388.6	433.4	447.0
75°	216.0	279.9	347.8	392.7	409.0
77.5°	176.6	240.5	308.4	356.0	368.2
80°	134.5	201.1	271.7	317.9	331.5
82.5°	97.8	165.8	237.8	284.0	297.6
85°	66.6	134.5	206.5	252.7	266.3
87.5°	40.8	108.7	178.0	224.2	237.8
90°	18.2	89.3	164.5	212.6	227.1
92.5°	30.1	91.3	162.0	208.2	219.5
95°	42.0	98.3	168.5	212.5	226.1
97.5°	58.2	109.4	176.1	219.1	232.2
100°	74.8	121.0	185.8	226.6	241.1
102.5°	94.2	133.6	198.0	237.4	250.5
105°	114.4	147.9	210.5	248.6	261.7
107.5°	136.9	165.9	223.5	261.5	273.4
110°	157.7	183.0	238.4	275.5	285.5

TEST NUMBER: P1031363

CATALOG NUMBER: S123DIW-B1000D460UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.7	200.2	251.8	288.1	300.3
115°	202.3	220.0	268.0	301.0	311.5
117.5°	225.8	237.2	282.4	315.0	324.5
120°	246.0	255.6	298.2	328.9	337.5
122.5°	268.6	273.2	314.4	342.9	351.0
125°	290.3	291.6	330.1	356.8	364.4
127.5°	311.4	312.8	345.9	370.3	378.0
130°	332.6	334.9	360.7	384.6	389.6
132.5°	352.3	356.0	375.5	397.7	404.9
135°	374.0	375.4	389.9	412.5	418.4
137.5°	393.8	394.8	405.6	425.0	430.5
140°	413.2	415.5	419.9	439.9	443.4
142.5°	432.0	432.9	433.8	451.1	455.6
145°	451.8	451.3	452.7	463.1	466.7
147.5°	467.4	469.3	470.6	474.7	477.4
150°	485.4	486.3	487.2	487.2	487.1
152.5°	500.1	501.5	501.9	502.9	500.5
155°	515.7	515.7	516.2	518.0	514.8
157.5°	529.1	528.6	529.1	530.9	528.2
160°	541.5	540.6	540.6	542.9	541.0
162.5°	552.5	551.2	551.6	553.9	550.7
165°	561.7	560.4	560.4	563.1	559.9
167.5°	569.6	567.7	568.2	570.9	568.2
170°	576.0	574.2	574.2	577.4	574.2
172.5°	581.1	579.2	579.2	582.0	578.8
175°	584.3	582.4	582.4	585.2	582.0
177.5°	586.1	584.3	584.3	587.0	583.8
180°	585.7	585.7	585.7	585.7	585.7

(END OF REPORT)