

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: P1031976

Luminaire Tested: S123DIW-B775D755UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031976
REPORT IS A COMBINATION OF REPORTS P992157 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D755UB40-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

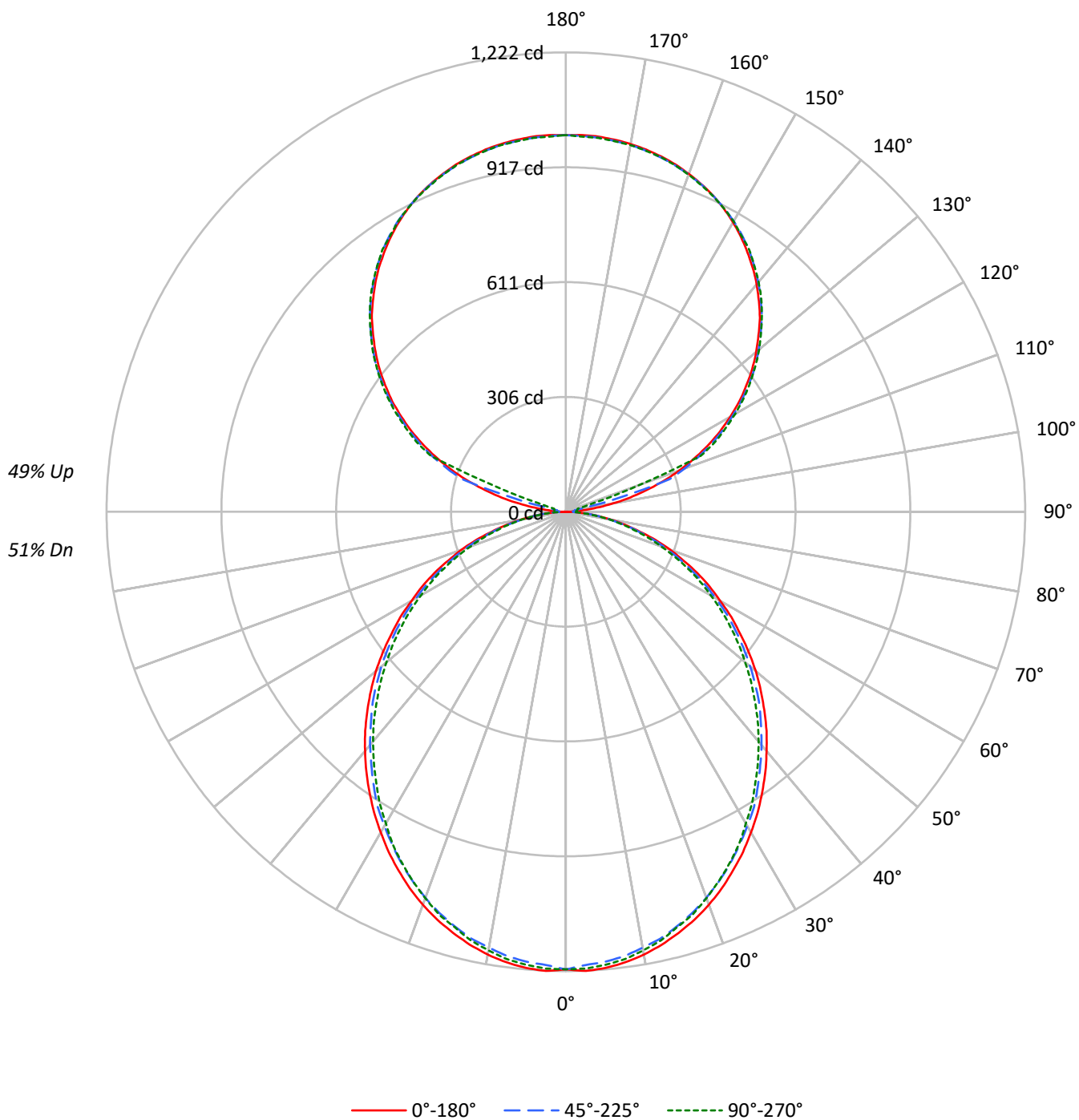
Lumens per Lamp: N/A
Luminaire Lumens: 6224.0 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	57	57	51
1	98	94	90	86	90	87	83	80	73	71	69	61	60	58	50	49	48	48	48	43
2	89	82	75	70	82	76	70	66	64	60	57	54	51	48	44	42	40	40	40	36
3	81	72	64	59	75	67	60	55	57	52	48	48	44	41	39	37	34	34	34	30
4	74	64	56	49	68	59	52	47	50	45	41	42	38	35	35	32	30	30	30	26
5	68	57	48	42	63	53	45	40	45	39	35	38	34	30	31	28	26	26	26	23
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	29	25	23	23	23	20
7	58	46	38	32	54	43	36	30	37	31	27	31	27	24	26	23	20	20	20	18
8	54	42	34	28	50	39	32	27	34	28	24	29	24	21	24	21	18	18	18	16
9	50	38	30	25	46	35	29	24	31	25	21	26	22	19	22	19	16	16	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	21	17	15	15	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13103	13103	13103
5°	13135	12651	12631
10°	13018	12222	12097
15°	12837	11777	11514
20°	12630	11282	10937
25°	12361	10762	10320
30°	12067	10221	9670
35°	11760	9669	9025
40°	11437	9091	8391
45°	11083	8527	7728
50°	10723	7898	7063
55°	10259	7243	6387
60°	9783	6520	5671
65°	9336	5738	4922
70°	8693	4872	4048
75°	7764	3858	3143
80°	6705	2712	2223
85°	5225	1456	1113

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11083 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	1.8
10°-20°	324.0	5.2
20°-30°	478.6	7.7
30°-40°	558.9	9.0
40°-50°	561.9	9.0
50°-60°	493.6	7.9
60°-70°	367.6	5.9
70°-80°	209.2	3.4
80°-90°	61.5	1.0
90°-100°	35.3	0.6
100°-110°	170.8	2.7
110°-120°	418.5	6.7
120°-130°	531.3	8.5
130°-140°	567.6	9.1
140°-150°	530.8	8.5
150°-160°	428.1	6.9
160°-170°	276.3	4.4
170°-180°	95.2	1.5
0°-30°	917.4	14.7
0°-40°	1476.3	23.7
0°-60°	2531.7	40.7
0°-90°	3170.0	50.9
90°-120°	624.7	10.0
90°-150°	2254.4	36.2
90°-180°	3054.0	49.1
0°-180°	6224.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1213	1202	1212	1210	116
15°	1160	1156	1142	1150	1144	327
25°	1053	1047	1033	1034	1031	485
35°	911	904	891	884	879	570
45°	746	742	728	716	711	576
55°	566	565	552	540	535	507
65°	386	381	370	362	359	381
75°	204	200	197	192	188	218
85°	54	52	52	50	50	58
90°	1	8	18	21	22	6
95°	45	15	23	28	28	54
105°	222	230	163	31	33	235
115°	416	420	427	435	438	411
125°	586	592	595	597	598	524
135°	730	735	738	740	738	562
145°	842	848	849	851	851	527
155°	928	927	927	931	927	428
165°	979	976	976	982	976	277
175°	1002	998	999	1004	998	95
180°	1002	1002	1002	1002	1002	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.3	1217.3	1217.3	1217.3	1217.3
2.5°	1222.5	1218.3	1206.8	1217.3	1216.2
5°	1218.3	1213.1	1201.6	1212.0	1209.9
7.5°	1208.9	1203.7	1192.1	1201.6	1200.5
10°	1196.3	1191.1	1177.5	1186.9	1184.8
12.5°	1179.6	1175.4	1162.8	1169.1	1168.1
15°	1159.7	1155.5	1141.9	1150.3	1144.0
17.5°	1137.7	1132.5	1118.9	1125.2	1123.1
20°	1112.6	1106.3	1092.7	1096.9	1093.8
22.5°	1084.3	1078.1	1064.5	1067.6	1063.4
25°	1052.9	1046.7	1033.1	1034.1	1031.0
27.5°	1020.5	1014.2	999.6	1000.6	997.5
30°	984.9	979.7	965.0	965.0	957.7
32.5°	949.3	942.0	931.5	924.2	921.1
35°	910.6	904.3	890.7	884.4	879.2
37.5°	871.9	863.5	849.9	842.6	839.4
40°	831.0	824.8	810.1	801.7	797.6
42.5°	790.2	782.9	768.2	759.9	755.7
45°	746.3	742.1	728.5	715.9	710.7
47.5°	703.4	697.1	684.5	672.0	667.8
50°	659.4	654.2	640.6	629.0	622.8
52.5°	613.3	610.2	595.5	586.1	579.8
55°	566.2	565.2	551.6	540.1	534.8
57.5°	522.3	518.1	507.6	497.2	490.9
60°	474.1	473.1	460.5	451.1	445.9
62.5°	431.2	428.1	415.5	406.1	403.0
65°	386.2	381.0	370.5	362.1	359.0
67.5°	338.1	333.9	325.5	318.2	314.0
70°	295.2	288.9	282.6	275.3	270.0
72.5°	250.2	246.0	238.6	232.4	230.3
75°	204.1	199.9	196.8	191.5	188.4
77.5°	163.3	161.2	157.0	152.8	152.8
80°	123.5	120.4	118.3	117.2	117.2
82.5°	84.8	84.8	84.8	82.7	81.6
85°	54.4	52.3	52.3	50.2	50.2
87.5°	27.2	24.1	23.0	22.0	22.0
90°	0.7	8.2	17.9	20.8	22.3
92.5°	17.1	12.7	19.4	24.6	25.3
95°	45.4	14.9	23.1	28.3	28.3
97.5°	82.6	61.8	23.8	29.8	30.5
100°	125.8	140.7	24.6	30.5	31.3
102.5°	174.9	184.6	55.1	30.5	32.0
105°	221.8	230.0	163.0	31.3	32.7
107.5°	271.7	278.4	289.5	174.9	77.4
110°	321.5	327.5	335.7	311.1	204.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	369.2	374.4	382.6	389.2	387.8
115°	416.0	420.5	427.2	434.6	437.6
117.5°	462.2	467.4	471.1	477.1	477.8
120°	504.6	511.3	513.5	519.5	519.5
122.5°	547.8	553.0	556.0	559.7	560.4
125°	586.5	592.4	595.4	596.9	598.4
127.5°	625.2	631.1	634.9	637.1	635.6
130°	660.9	666.9	669.8	672.8	671.3
132.5°	695.1	701.1	703.3	706.3	704.1
135°	730.1	734.6	737.6	739.8	737.6
137.5°	759.9	765.8	767.3	771.1	769.6
140°	789.7	794.1	796.4	799.3	797.8
142.5°	817.2	821.7	823.9	826.1	823.9
145°	842.5	847.7	849.2	850.7	850.7
147.5°	867.1	870.8	872.3	873.8	870.0
150°	889.4	891.6	893.1	894.6	892.4
152.5°	909.5	910.2	911.0	914.0	910.2
155°	928.1	926.6	927.3	931.1	926.6
157.5°	943.0	943.0	942.2	946.7	940.7
160°	956.4	955.6	954.9	959.4	954.1
162.5°	969.0	966.8	966.1	971.3	966.8
165°	978.7	976.5	975.7	981.7	976.5
167.5°	986.9	983.9	983.9	989.9	983.9
170°	993.6	990.6	990.6	996.6	990.6
172.5°	998.1	994.3	995.1	1001.0	994.3
175°	1001.8	998.1	998.8	1004.0	998.1
177.5°	1003.3	999.5	1000.3	1006.2	998.8
180°	1001.8	1001.8	1001.8	1001.8	1001.8

(END OF REPORT)