

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P199393

Luminaire Tested: **S122-DIW-U1-2-35-0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199393
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27883 P27986)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-DIW-U1-2-35-0048-1D-UDD-1-NA-W
Description: DEFINE 2-INCH DIRECT/INDIRECT WALL LED LUMINAIRE
UPLIGHT LL1-3500K, NO LENS
DOWNLIGHT LL2-3500K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

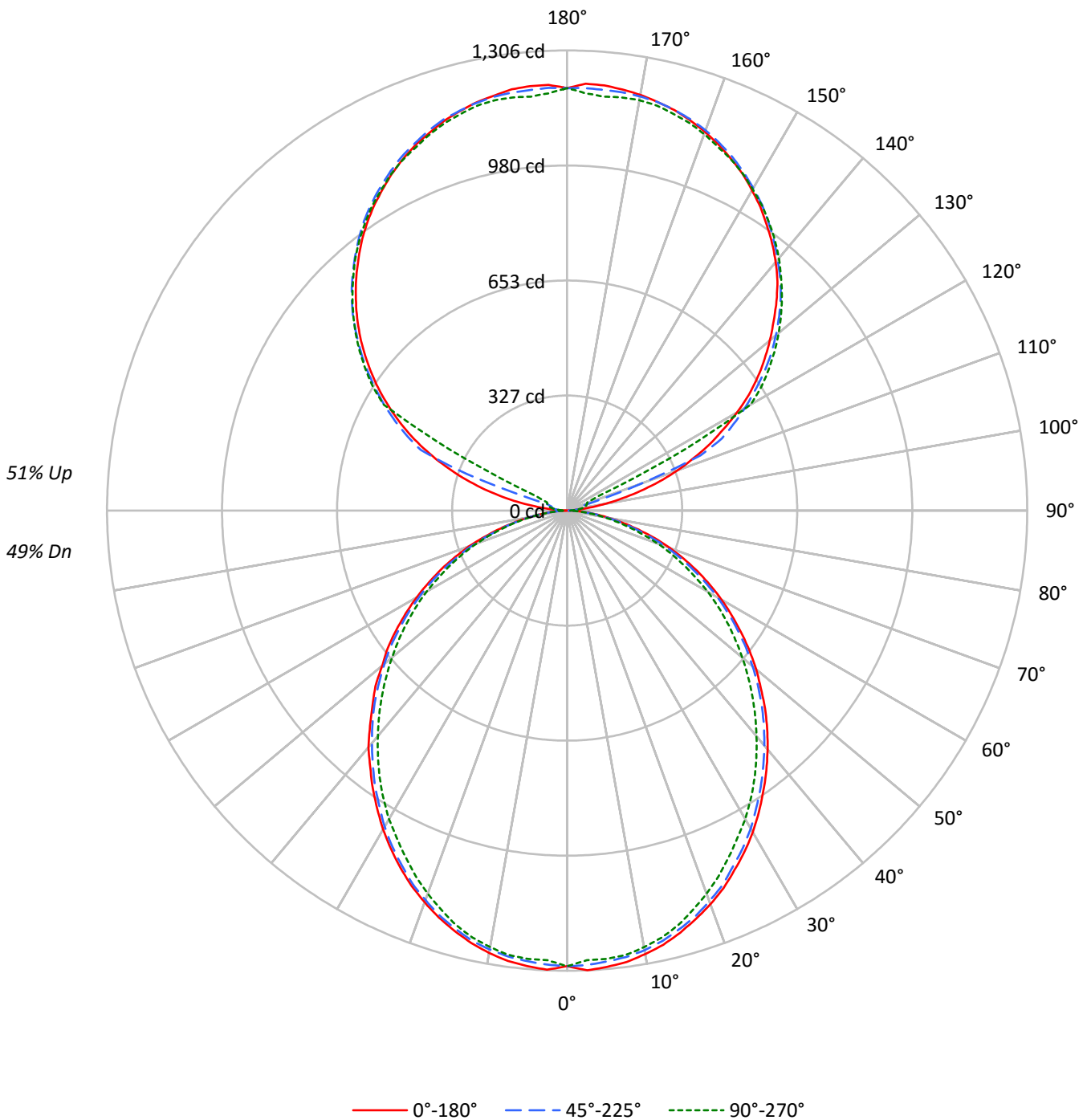
Lumens per Lamp: N/A
Luminaire Lumens: 6730.3 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.17 / 1.31
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4.08' x H: 0.38')
CIE Type: General Diffuse

Input Watts (W): 67
Input Voltage (V): NR
Input Current (A_{in}): 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: 25 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	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49				49
1	98	93	90	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42				42
2	89	82	75	70	82	75	70	66	64	60	57	53	50	48	43	41	40	35				35
3	81	72	64	59	75	66	60	55	56	52	48	47	44	41	38	36	34	30				30
4	74	63	56	50	68	59	52	46	50	45	41	42	38	35	34	31	29	25				25
5	68	57	48	42	63	52	45	40	45	39	35	38	33	30	31	28	25	22				22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19				19
7	58	46	38	32	53	43	35	30	37	31	27	31	27	23	26	22	20	17				17
8	54	42	34	28	50	39	32	27	33	28	24	28	24	21	24	20	18	15				15
9	50	38	30	25	46	35	29	24	31	25	21	26	22	19	22	18	16	14				14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	15	13				13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	20450	20450	20450
5°	20475	16940	20443
10°	20198	14465	20150
15°	19816	12442	19736
20°	19365	10706	19267
25°	18826	9240	18726
30°	18280	8031	18124
35°	17615	6950	17452
40°	16965	5977	16811
45°	16286	5114	16000
50°	15525	4338	15192
55°	14675	3632	14431
60°	13809	2978	13454
65°	12757	2339	12319
70°	11447	1758	10893
75°	9557	1184	8920
80°	7127	688	6468
85°	4427	272	3718



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.9	1.8
10°-20°	345.1	5.1
20°-30°	509.0	7.6
30°-40°	593.6	8.8
40°-50°	594.8	8.8
50°-60°	520.3	7.7
60°-70°	382.8	5.7
70°-80°	207.5	3.1
80°-90°	53.2	0.8
90°-100°	30.0	0.4
100°-110°	134.6	2.0
110°-120°	391.3	5.8
120°-130°	611.5	9.1
130°-140°	659.2	9.8
140°-150°	623.0	9.3
150°-160°	508.0	7.5
160°-170°	330.6	4.9
170°-180°	113.9	1.7
0°-30°	976.0	14.5
0°-40°	1569.6	23.3
0°-60°	2684.7	39.9
0°-90°	3328.2	49.5
90°-120°	555.9	8.3
90°-150°	2449.6	36.4
90°-180°	3402.0	50.5
0°-180°	6730.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1293	1293	1293	1293	1293	
5°	1300	1285	1277	1284	1298	123
15°	1240	1230	1218	1228	1235	350
25°	1125	1114	1085	1111	1119	519
35°	971	958	927	951	962	608
45°	795	781	743	773	781	612
55°	602	591	555	580	592	539
65°	408	392	364	380	394	404
75°	210	200	182	187	196	224
85°	50	47	40	41	42	56
90°	2	5	7	6	1	4
95°	29	24	27	28	51	41
105°	216	46	56	47	254	230
115°	447	485	99	501	478	440
125°	660	681	698	692	677	589
135°	840	857	862	865	848	648
145°	988	997	999	1004	992	619
155°	1101	1108	1100	1109	1102	508
165°	1177	1177	1166	1175	1174	332
175°	1211	1198	1179	1198	1209	115
180°	1199	1199	1199	1199	1199	



TEST NUMBER: P199393

CATALOG NUMBER: S122-DIW-U1-2-35-0048-1D-UDD-1-NA-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1293.0	1293.0	1293.0	1293.0	1293.0	1293.0	1293.0	1293.0	1293.0
2.5°	1306.0	1288.0	1291.0	1287.0	1277.0	1286.0	1290.0	1287.0	1304.0
5°	1300.0	1282.0	1285.0	1280.0	1277.0	1280.0	1284.0	1280.0	1298.0
7.5°	1292.0	1272.0	1278.0	1275.0	1272.0	1274.0	1277.0	1270.0	1289.0
10°	1278.0	1258.0	1267.0	1261.0	1258.0	1260.0	1265.0	1255.0	1275.0
12.5°	1262.0	1242.0	1251.0	1244.0	1241.0	1241.0	1250.0	1239.0	1257.0
15°	1240.0	1224.0	1230.0	1223.0	1218.0	1221.0	1228.0	1220.0	1235.0
17.5°	1215.0	1201.0	1208.0	1197.0	1188.0	1195.0	1205.0	1196.0	1211.0
20°	1189.0	1173.0	1180.0	1165.0	1157.0	1163.0	1176.0	1169.0	1183.0
22.5°	1160.0	1145.0	1151.0	1131.0	1123.0	1128.0	1147.0	1140.0	1153.0
25°	1125.0	1113.0	1114.0	1094.0	1085.0	1091.0	1111.0	1107.0	1119.0
27.5°	1091.0	1079.0	1080.0	1057.0	1047.0	1055.0	1075.0	1072.0	1083.0
30°	1054.0	1043.0	1042.0	1019.0	1011.0	1016.0	1036.0	1036.0	1045.0
32.5°	1013.0	1004.0	999.0	978.0	970.0	976.0	993.0	996.0	1003.0
35°	971.0	965.0	958.0	938.0	927.0	935.0	951.0	955.0	962.0
37.5°	929.0	922.0	914.0	894.0	882.0	892.0	906.0	913.0	918.0
40°	885.0	880.0	871.0	851.0	836.0	846.0	862.0	870.0	877.0
42.5°	840.0	837.0	826.0	805.0	790.0	801.0	818.0	825.0	828.0
45°	795.0	791.0	781.0	759.0	743.0	755.0	773.0	780.0	781.0
47.5°	745.0	746.0	734.0	712.0	696.0	708.0	724.0	734.0	738.0
50°	700.0	701.0	687.0	665.0	649.0	658.0	677.0	687.0	685.0
52.5°	652.0	655.0	640.0	618.0	602.0	611.0	630.0	641.0	642.0
55°	602.0	607.0	591.0	569.0	555.0	564.0	580.0	593.0	592.0
57.5°	554.0	558.0	542.0	522.0	508.0	516.0	530.0	547.0	543.0
60°	506.0	510.0	493.0	473.0	461.0	465.0	481.0	495.0	493.0
62.5°	457.0	461.0	443.0	425.0	411.0	417.0	431.0	448.0	443.0
65°	408.0	411.0	392.0	376.0	364.0	370.0	380.0	398.0	394.0
67.5°	359.0	361.0	344.0	329.0	319.0	322.0	331.0	346.0	344.0
70°	310.0	312.0	296.0	282.0	273.0	276.0	283.0	297.0	295.0
72.5°	260.0	263.0	247.0	234.0	225.0	228.0	233.0	246.0	243.0
75°	210.0	212.0	200.0	190.0	182.0	183.0	187.0	197.0	196.0
77.5°	164.0	169.0	156.0	147.0	141.0	142.0	147.0	152.0	150.0
80°	119.0	125.0	116.0	109.0	104.0	103.0	107.0	111.0	108.0
82.5°	84.0	85.0	79.0	74.0	69.0	69.0	72.0	75.0	72.0
85°	50.0	52.0	47.0	43.0	40.0	39.0	41.0	44.0	42.0
87.5°	24.0	25.0	20.0	18.0	15.0	14.0	15.0	17.0	17.0
90°	2.0	5.0	5.0	6.0	7.0	7.0	6.0	6.0	1.0
92.5°	4.2	9.7	9.7	11.8	12.5	14.6	16.7	17.4	18.8
95°	29.2	20.8	23.6	25.7	27.1	29.2	27.8	25.7	50.7
97.5°	65.3	26.4	33.3	34.7	36.8	37.5	37.5	29.2	92.4
100°	109.0	30.6	39.6	45.1	46.5	46.5	42.4	65.3	142.4
102.5°	160.4	136.1	43.1	50.0	52.8	50.7	45.1	221.6	198.0
105°	216.0	245.2	45.8	52.8	55.6	54.2	47.2	273.0	254.2
107.5°	274.4	297.3	48.6	55.6	58.3	56.3	57.6	325.8	310.5
110°	332.7	352.1	218.1	57.6	60.4	57.6	302.1	379.2	366.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	388.3	408.4	409.8	61.1	61.8	66.0	449.4	433.4	423.0
115°	446.6	463.3	484.8	282.0	98.6	310.5	500.8	486.9	477.9
117.5°	500.1	516.1	532.7	495.9	377.8	539.7	550.1	539.7	530.6
120°	556.3	572.3	582.7	599.4	600.8	600.8	598.7	590.4	580.7
122.5°	611.9	622.3	630.7	647.3	652.9	646.6	645.3	637.6	630.0
125°	660.5	670.3	681.4	692.5	698.0	691.8	692.5	682.8	677.2
127.5°	706.4	714.7	729.3	736.2	741.8	734.9	737.6	727.2	723.0
130°	750.8	756.4	773.1	778.6	783.5	779.3	781.4	770.3	766.8
132.5°	794.6	802.2	816.1	818.2	823.8	817.5	825.1	809.9	808.5
135°	840.4	846.7	857.1	857.8	862.0	858.5	864.7	852.2	848.1
137.5°	883.5	886.3	895.3	892.5	898.8	893.2	902.2	889.7	887.0
140°	921.0	923.1	929.3	930.7	934.9	930.0	937.0	924.5	923.1
142.5°	955.7	958.5	964.1	963.4	968.2	963.4	971.7	960.6	959.2
145°	988.4	992.5	997.4	995.3	998.8	996.0	1004.3	992.5	991.8
147.5°	1021.0	1022.4	1029.3	1025.9	1028.0	1024.5	1033.5	1023.8	1022.4
150°	1049.5	1052.3	1056.4	1052.3	1053.0	1050.9	1059.9	1051.6	1050.2
152.5°	1078.0	1077.3	1083.5	1075.2	1078.7	1075.2	1085.6	1077.3	1077.3
155°	1100.9	1100.2	1107.8	1098.8	1100.2	1097.4	1109.2	1099.5	1101.6
157.5°	1123.8	1120.3	1129.4	1120.3	1117.6	1119.6	1128.7	1119.6	1123.8
160°	1143.9	1140.5	1148.8	1139.1	1137.0	1138.4	1148.1	1139.8	1141.2
162.5°	1161.3	1156.5	1164.1	1153.7	1153.7	1151.6	1164.1	1155.8	1159.9
165°	1176.6	1171.0	1177.3	1166.9	1165.5	1164.1	1175.2	1169.6	1173.8
167.5°	1187.7	1182.2	1187.7	1175.9	1177.3	1174.5	1185.6	1182.2	1187.0
170°	1198.1	1191.2	1193.3	1182.8	1182.8	1180.8	1192.6	1189.1	1196.0
172.5°	1205.1	1197.4	1197.4	1185.6	1182.8	1184.2	1196.7	1196.0	1205.8
175°	1211.3	1200.9	1198.1	1187.0	1179.4	1186.3	1198.1	1200.2	1209.2
177.5°	1212.7	1203.0	1200.2	1187.7	1185.6	1186.3	1200.9	1201.6	1209.2
180°	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8	1198.8

(END OF REPORT)