

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: P199410

Luminaire Tested: **S122-DIW-U2-2-35-0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199410
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27883 P27883)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-DIW-U2-2-35-0048-1D-UDD-1-5-W
Description: DEFINE 2-INCH DIRECT/INDIRECT WALL LED LUMINAIRE
UPLIGHT LL2-3500K, SATIN WHITE DIFFUSER
DOWNLIGHT LL2-3500K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

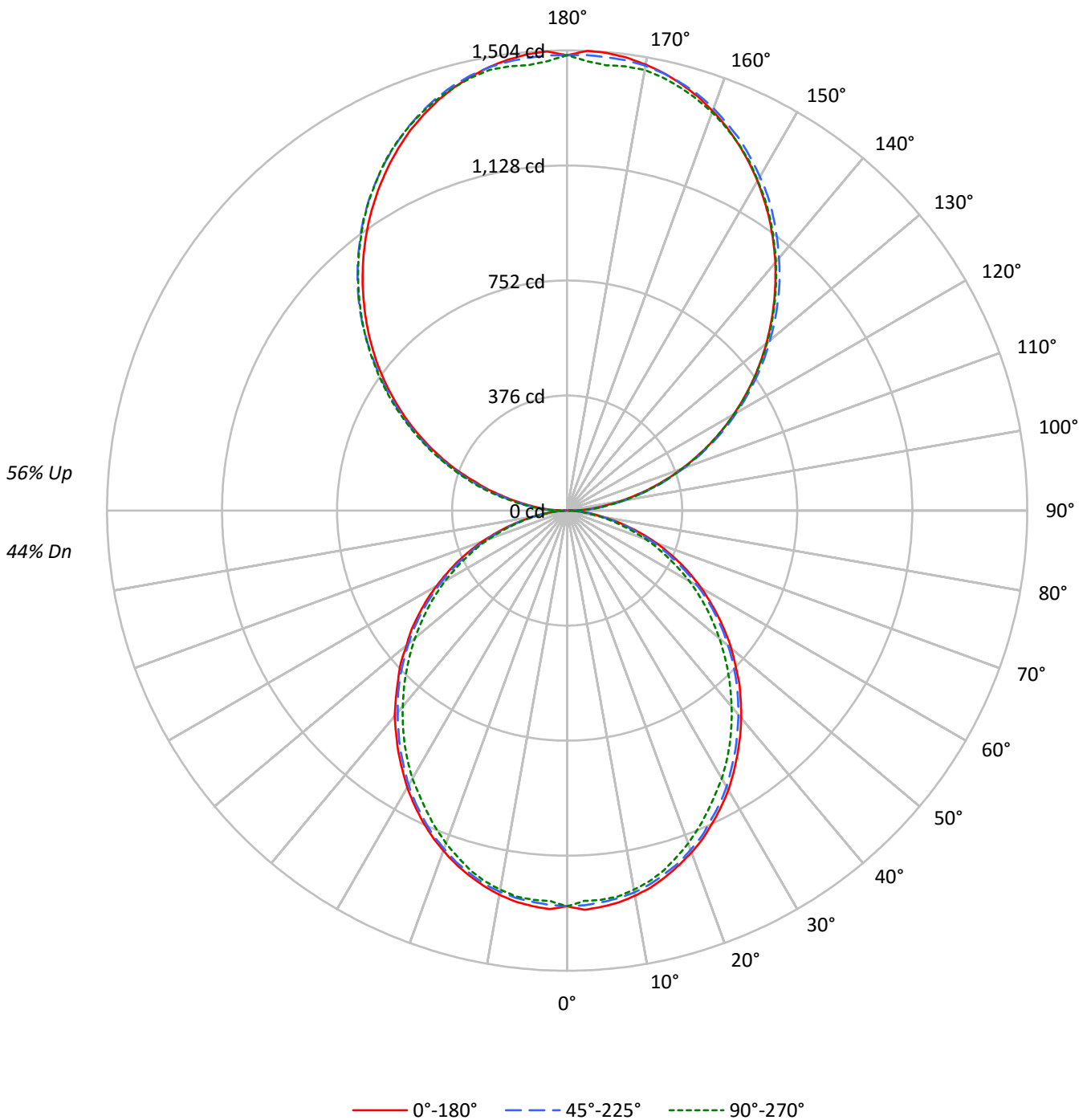
Lumens per Lamp: N/A
Luminaire Lumens: 7527.2 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.17 / 1.31
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4.08' x H: 0.38')
CIE Type: General Diffuse

Input Watts (W): 80.5
Input Voltage (V): NR
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: 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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	88	85	88	85	81	78	70	68	66	57	56	54	45	44	43	37
2	88	81	75	69	80	74	69	64	62	58	55	50	47	45	40	38	36	31
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31	27
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	49	38	31	26	32	27	23	27	22	19	21	18	16	14
9	49	37	30	25	45	35	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

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	1.6
10°-20°	345.1	4.6
20°-30°	509.0	6.8
30°-40°	593.6	7.9
40°-50°	594.8	7.9
50°-60°	520.3	6.9
60°-70°	382.8	5.1
70°-80°	207.5	2.8
80°-90°	53.2	0.7
90°-100°	103.2	1.4
100°-110°	302.8	4.0
110°-120°	509.3	6.8
120°-130°	664.2	8.8
130°-140°	740.5	9.8
140°-150°	724.1	9.6
150°-160°	609.1	8.1
160°-170°	404.9	5.4
170°-180°	141.0	1.9
0°-30°	976.0	13.0
0°-40°	1569.6	20.9
0°-60°	2684.7	35.7
0°-90°	3328.2	44.2
90°-120°	915.3	12.2
90°-150°	3044.0	40.4
90°-180°	4199.0	55.8
0°-180°	7527.2	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	11
95°	86	99	98	93	81	89
105°	284	296	292	282	267	300
115°	515	523	515	508	497	509
125°	741	753	743	738	724	662
135°	956	975	959	963	937	737
145°	1155	1174	1159	1161	1136	722
155°	1323	1337	1324	1323	1306	609
165°	1443	1446	1431	1438	1431	407
175°	1501	1487	1461	1485	1497	143
180°	1488	1488	1488	1488	1488	



TEST NUMBER: P199410

CATALOG NUMBER: S122-DIW-U2-2-35-0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1293	1293	1293	1293	1293	1293	1293	1293	1293
2.5°	1306	1288	1291	1287	1277	1286	1290	1287	1304
5°	1300	1282	1285	1280	1277	1280	1284	1280	1298
7.5°	1292	1272	1278	1275	1272	1274	1277	1270	1289
10°	1278	1258	1267	1261	1258	1260	1265	1255	1275
12.5°	1262	1242	1251	1244	1241	1241	1250	1239	1257
15°	1240	1224	1230	1223	1218	1221	1228	1220	1235
17.5°	1215	1201	1208	1197	1188	1195	1205	1196	1211
20°	1189	1173	1180	1165	1157	1163	1176	1169	1183
22.5°	1160	1145	1151	1131	1123	1128	1147	1140	1153
25°	1125	1113	1114	1094	1085	1091	1111	1107	1119
27.5°	1091	1079	1080	1057	1047	1055	1075	1072	1083
30°	1054	1043	1042	1019	1011	1016	1036	1036	1045
32.5°	1013	1004	999	978	970	976	993	996	1003
35°	971	965	958	938	927	935	951	955	962
37.5°	929	922	914	894	882	892	906	913	918
40°	885	880	871	851	836	846	862	870	877
42.5°	840	837	826	805	790	801	818	825	828
45°	795	791	781	759	743	755	773	780	781
47.5°	745	746	734	712	696	708	724	734	738
50°	700	701	687	665	649	658	677	687	685
52.5°	652	655	640	618	602	611	630	641	642
55°	602	607	591	569	555	564	580	593	592
57.5°	554	558	542	522	508	516	530	547	543
60°	506	510	493	473	461	465	481	495	493
62.5°	457	461	443	425	411	417	431	448	443
65°	408	411	392	376	364	370	380	398	394
67.5°	359	361	344	329	319	322	331	346	344
70°	310	312	296	282	273	276	283	297	295
72.5°	260	263	247	234	225	228	233	246	243
75°	210	212	200	190	182	183	187	197	196
77.5°	164	169	156	147	141	142	147	152	150
80°	119	125	116	109	104	103	107	111	108
82.5°	84	85	79	74	69	69	72	75	72
85°	50	52	47	43	40	39	41	44	42
87.5°	24	25	20	18	15	14	15	17	17
90°	2	5	5	6	7	7	6	6	1
92.5°	54	60	63	61	60	57	57	54	48
95°	86	95	99	98	98	94	93	90	81
97.5°	127	137	140	141	140	135	132	129	119
100°	174	184	187	187	186	181	177	173	162
102.5°	226	236	239	237	237	230	226	223	211
105°	284	294	296	293	292	285	282	278	267
107.5°	340	350	349	348	344	339	337	331	317
110°	398	411	406	404	400	395	393	391	380



TEST NUMBER: P199410

CATALOG NUMBER: S122-DIW-U2-2-35-0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	456	470	464	462	457	451	451	450	439
115°	515	529	523	519	515	509	508	509	497
117.5°	572	588	581	576	572	565	566	568	555
120°	629	647	639	633	630	622	623	627	612
122.5°	685	703	696	690	687	678	680	682	668
125°	741	759	753	746	743	737	738	738	724
127.5°	796	814	810	802	798	790	794	791	779
130°	850	867	865	856	853	848	851	842	833
132.5°	903	920	921	911	907	902	908	898	886
135°	956	971	975	964	959	955	963	947	937
137.5°	1007	1019	1028	1015	1011	1004	1014	998	989
140°	1059	1069	1077	1067	1062	1056	1064	1048	1039
142.5°	1107	1118	1126	1116	1110	1105	1113	1096	1088
145°	1155	1164	1174	1165	1159	1154	1161	1144	1136
147.5°	1200	1208	1220	1210	1204	1200	1205	1188	1181
150°	1244	1248	1260	1254	1246	1242	1246	1231	1225
152.5°	1285	1288	1299	1292	1288	1281	1286	1271	1267
155°	1323	1324	1337	1329	1324	1319	1323	1311	1306
157.5°	1359	1359	1368	1364	1356	1354	1357	1344	1343
160°	1390	1388	1399	1392	1385	1383	1388	1376	1375
162.5°	1419	1415	1425	1416	1410	1408	1415	1404	1405
165°	1443	1438	1446	1437	1431	1430	1438	1427	1431
167.5°	1464	1456	1463	1454	1449	1448	1457	1447	1453
170°	1480	1470	1476	1464	1462	1460	1471	1462	1472
172.5°	1493	1482	1484	1471	1464	1468	1480	1475	1486
175°	1501	1489	1487	1473	1461	1470	1485	1484	1497
177.5°	1504	1493	1490	1474	1470	1472	1489	1490	1502
180°	1488	1488	1488	1488	1488	1488	1488	1488	1488

(END OF REPORT)