

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: G3-1802-639-51

Luminaire Tested: S125DRP-H850D835-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: G3-1802-639-51
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H850D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

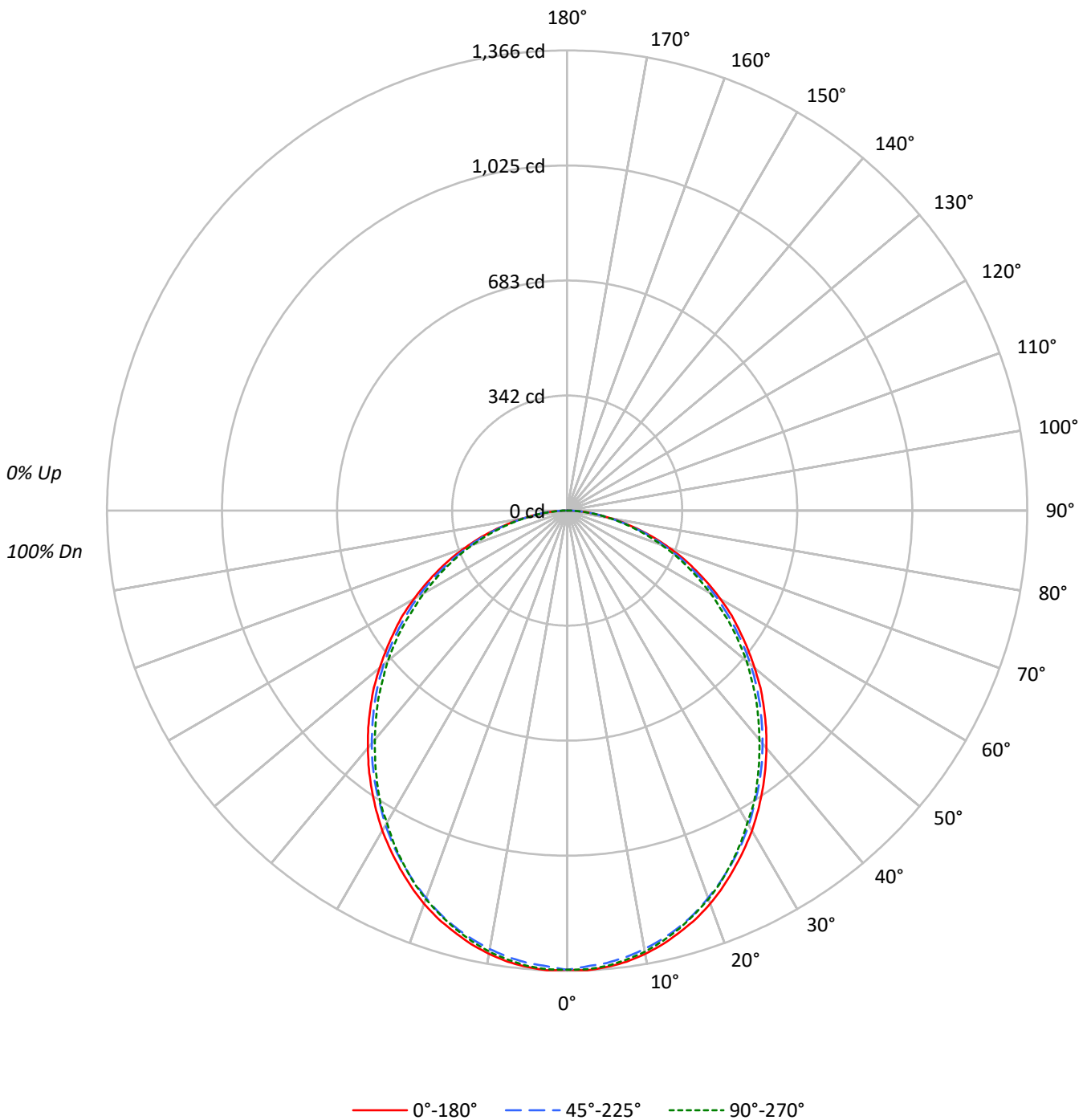
Lumens per Lamp: N/A
Luminaire Lumens: 3518.3 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.4' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 25.6
Input Voltage (V): 120
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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CATALOG NUMBER: S125DRP-H850D835-X4F0-XX-UDD-F-W

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	50	30	10	50	30	10	0																			
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																												
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70																												
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60																												
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51																												
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44																												
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39																												
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35																												
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31																												
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28																												
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9315	9315	9315
5°	9330	9247	9309
10°	9271	9174	9229
15°	9162	9063	9091
20°	9032	8901	8923
25°	8845	8717	8702
30°	8656	8507	8443
35°	8434	8284	8209
40°	8207	8047	7922
45°	7983	7809	7664
50°	7719	7559	7389
55°	7458	7256	7065
60°	7176	6971	6725
65°	6840	6597	6371
70°	6414	6174	5974
75°	5914	5730	5466
80°	5155	5116	4998
85°	4469	4469	4234

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7983 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.6	3.7
10°-20°	362.9	10.3
20°-30°	534.9	15.2
30°-40°	622.9	17.7
40°-50°	624.2	17.7
50°-60°	545.7	15.5
60°-70°	405.0	11.5
70°-80°	229.7	6.5
80°-90°	64.4	1.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1026.4	29.2
0°-40°	1649.3	46.9
0°-60°	2819.2	80.1
0°-90°	3518.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3518.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1363	1363	1363	1363	1363	
5°	1360	1358	1348	1358	1357	129
15°	1295	1293	1281	1288	1285	365
25°	1173	1169	1156	1159	1154	540
35°	1011	1005	993	987	984	633
45°	826	824	808	796	793	637
55°	626	625	609	596	593	560
65°	423	420	408	399	394	419
75°	224	220	217	213	207	237
85°	57	57	57	55	54	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1363	1363	1363	1363	1363
2.5°	1366	1364	1354	1364	1363
5°	1360	1358	1348	1358	1357
7.5°	1351	1348	1337	1347	1345
10°	1336	1334	1322	1330	1330
12.5°	1318	1315	1303	1310	1309
15°	1295	1293	1281	1288	1285
17.5°	1271	1266	1255	1261	1257
20°	1242	1238	1224	1229	1227
22.5°	1209	1204	1191	1194	1193
25°	1173	1169	1156	1159	1154
27.5°	1136	1131	1119	1119	1114
30°	1097	1092	1078	1078	1070
32.5°	1055	1051	1034	1033	1031
35°	1011	1005	993	987	984
37.5°	967	962	949	941	936
40°	920	917	902	895	888
42.5°	874	871	855	843	840
45°	826	824	808	796	793
47.5°	778	776	760	747	742
50°	726	726	711	698	695
52.5°	676	675	660	647	644
55°	626	625	609	596	593
57.5°	579	573	559	549	539
60°	525	522	510	497	492
62.5°	475	471	459	448	441
65°	423	420	408	399	394
67.5°	374	370	358	351	347
70°	321	318	309	300	299
72.5°	274	270	265	257	253
75°	224	220	217	213	207
77.5°	176	174	172	169	166
80°	131	131	130	128	127
82.5°	93	94	91	89	89
85°	57	57	57	55	54
87.5°	28	25	25	23	23
90°	0	0	0	0	0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.06	20.68	19.43	20.99	21.30	18.73	20.34	19.09	20.65	20.97
	3H	20.82	22.28	21.20	22.60	22.96	20.44	21.90	20.81	22.22	22.58
	4H	21.47	22.84	21.87	23.19	23.57	21.08	22.45	21.47	22.80	23.17
	6H	21.93	23.20	22.34	23.57	23.96	21.55	22.82	21.96	23.19	23.58
	8H	22.08	23.29	22.50	23.68	24.08	21.70	22.92	22.13	23.31	23.71
	12H	22.18	23.34	22.61	23.73	24.15	21.81	22.97	22.24	23.35	23.78
4H	2H	19.63	21.01	20.03	21.35	21.73	19.37	20.74	19.77	21.09	21.46
	3H	21.61	22.77	22.02	23.16	23.56	21.30	22.45	21.71	22.85	23.25
	4H	22.39	23.43	22.82	23.85	24.28	22.06	23.11	22.50	23.52	23.95
	6H	22.98	23.89	23.44	24.33	24.79	22.67	23.57	23.12	24.02	24.47
	8H	23.18	24.03	23.64	24.47	24.94	22.87	23.72	23.33	24.16	24.62
	12H	23.32	24.09	23.80	24.56	25.03	23.01	23.77	23.49	24.25	24.72
8H	4H	22.67	23.52	23.13	23.97	24.43	22.39	23.24	22.85	23.68	24.14
	6H	23.38	24.09	23.88	24.58	25.05	23.11	23.81	23.60	24.30	24.78
	8H	23.66	24.29	24.16	24.80	25.28	23.38	24.01	23.89	24.52	25.00
	12H	23.88	24.44	24.38	24.93	25.49	23.59	24.16	24.10	24.65	25.21
12H	4H	22.70	23.47	23.18	23.94	24.41	22.42	23.18	22.90	23.66	24.13
	6H	23.43	24.07	23.94	24.57	25.06	23.16	23.80	23.67	24.31	24.79
	8H	23.76	24.32	24.27	24.81	25.37	23.49	24.06	24.00	24.55	25.11