

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: G3-1802-639-51

Luminaire Tested: **S125DR-H850D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: G3-1802-639-51  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DR-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: ELECTRONIC 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

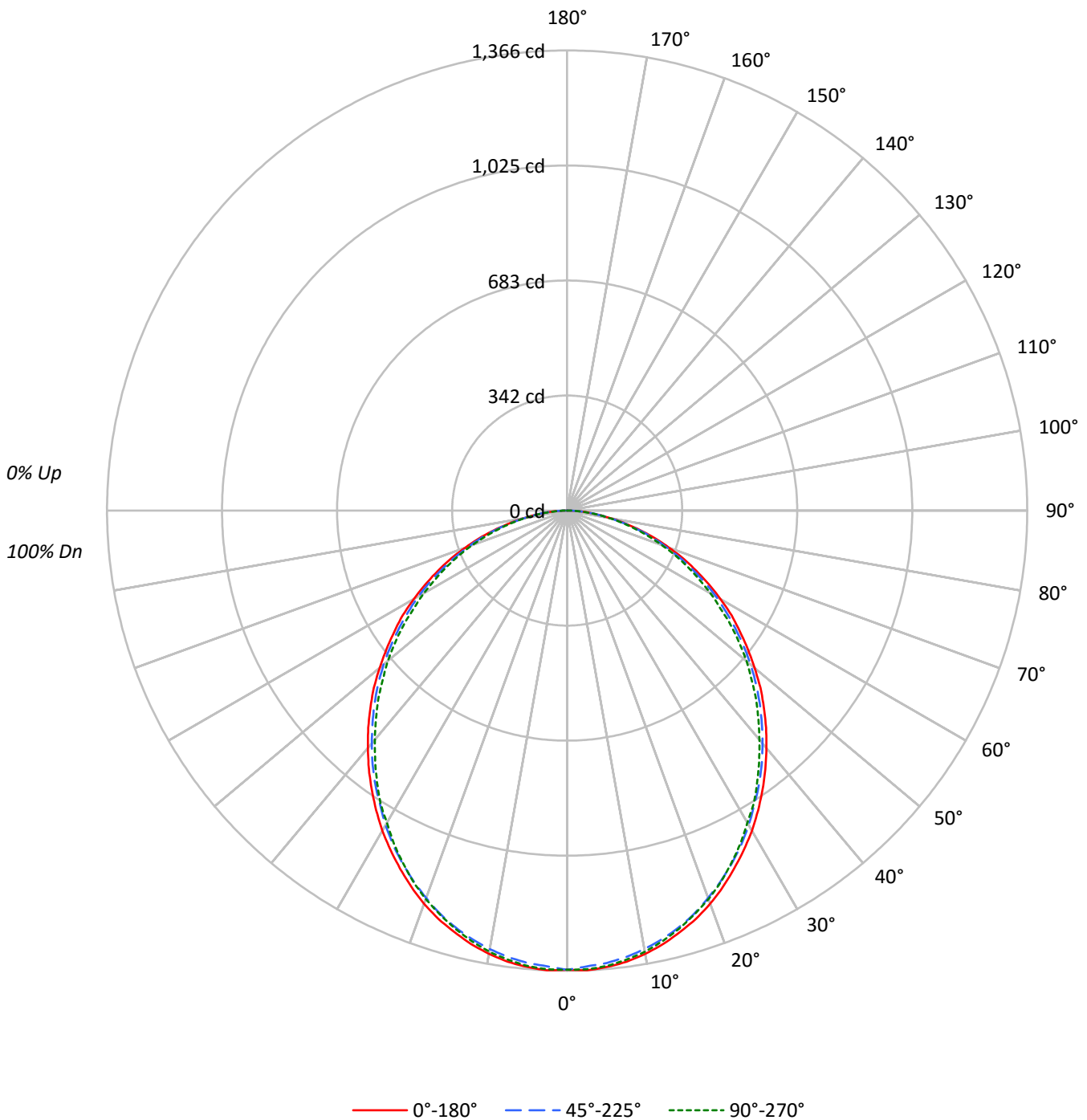
Input Watts (W): 25.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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



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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

(END OF REPORT)