

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: G3-1802-639-66

Luminaire Tested: **S125RDR-H850D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-66
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDR-H850D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED 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: 3341.6 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.41' x L: 3.88' x H: 0')
CIE Type: Direct

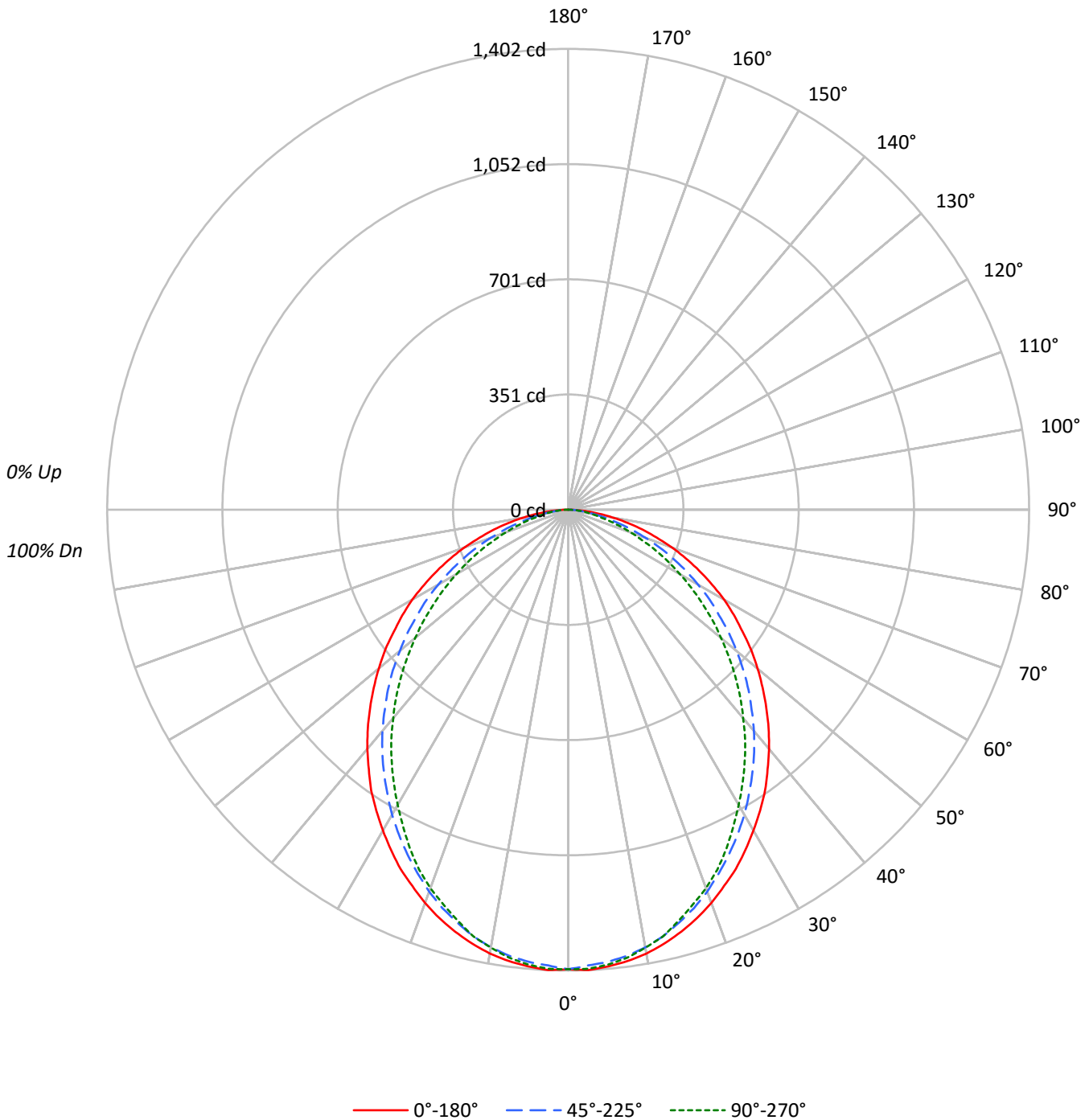
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: G3-1802-639-66

CATALOG NUMBER: S125RDR-H850D835-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: G3-1802-639-66

CATALOG NUMBER: S125RDR-H850D835-X4F0-XX-UDD-F-W

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9559	9559	9559
5°	9575	9479	9534
10°	9519	9387	9394
15°	9408	9210	9167
20°	9263	8994	8914
25°	9099	8729	8586
30°	8898	8456	8188
35°	8714	8155	7813
40°	8480	7846	7391
45°	8239	7494	6953
50°	7999	7106	6457
55°	7713	6676	5937
60°	7480	6236	5374
65°	7119	5711	4757
70°	6717	4998	4058
75°	6182	4174	3302
80°	5434	3229	2717
85°	4629	2667	2510



TEST NUMBER: G3-1802-639-66

CATALOG NUMBER: S125RDR-H850D835-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.7	3.9
10°-20°	368.8	11.0
20°-30°	536.7	16.1
30°-40°	614.6	18.4
40°-50°	601.4	18.0
50°-60°	507.8	15.2
60°-70°	355.5	10.6
70°-80°	180.6	5.4
80°-90°	44.4	1.3
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°	1037.2	31.0
0°-40°	1651.8	49.4
0°-60°	2761.1	82.6
0°-90°	3341.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3341.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1398	1398	1398	1398	1398	
5°	1395	1392	1381	1390	1389	132
15°	1329	1324	1301	1300	1295	375
25°	1206	1192	1157	1145	1138	555
35°	1044	1019	977	948	936	652
45°	852	824	775	734	719	658
55°	647	619	560	515	498	581
65°	440	406	353	309	294	436
75°	234	205	158	132	125	247
85°	59	38	34	32	32	67
90°	0	0	0	0	0	



TEST NUMBER: G3-1802-639-66

CATALOG NUMBER: S125RDR-H850D835-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1398	1398	1398	1398	1398
2.5°	1402	1399	1388	1398	1398
5°	1395	1392	1381	1390	1389
7.5°	1385	1382	1369	1378	1375
10°	1371	1367	1352	1357	1353
12.5°	1352	1348	1330	1332	1330
15°	1329	1324	1301	1300	1295
17.5°	1303	1296	1271	1268	1260
20°	1273	1264	1236	1230	1225
22.5°	1239	1230	1197	1188	1185
25°	1206	1192	1157	1145	1138
27.5°	1167	1151	1115	1099	1087
30°	1127	1109	1071	1050	1037
32.5°	1086	1065	1024	998	987
35°	1044	1019	977	948	936
37.5°	996	971	929	895	884
40°	950	924	879	842	828
42.5°	902	875	826	787	775
45°	852	824	775	734	719
47.5°	802	774	723	682	663
50°	752	722	668	626	607
52.5°	702	669	616	571	554
55°	647	619	560	515	498
57.5°	598	567	511	465	446
60°	547	513	456	411	393
62.5°	493	459	404	359	343
65°	440	406	353	309	294
67.5°	387	355	302	261	244
70°	336	303	250	213	203
72.5°	282	256	203	170	162
75°	234	205	158	132	125
77.5°	185	157	117	99	93
80°	138	114	82	71	69
82.5°	95	72	54	52	51
85°	59	38	34	32	32
87.5°	25	16	16	15	16
90°	0	0	0	0	0

(END OF REPORT)