

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: G3-1802-639-65

Luminaire Tested: **S124RDR-H795D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-65
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDR-H795D835-X4F0-XX-UDD-F-W
Description: DEFINE 4 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: 3195.2 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.1 / 1.25
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

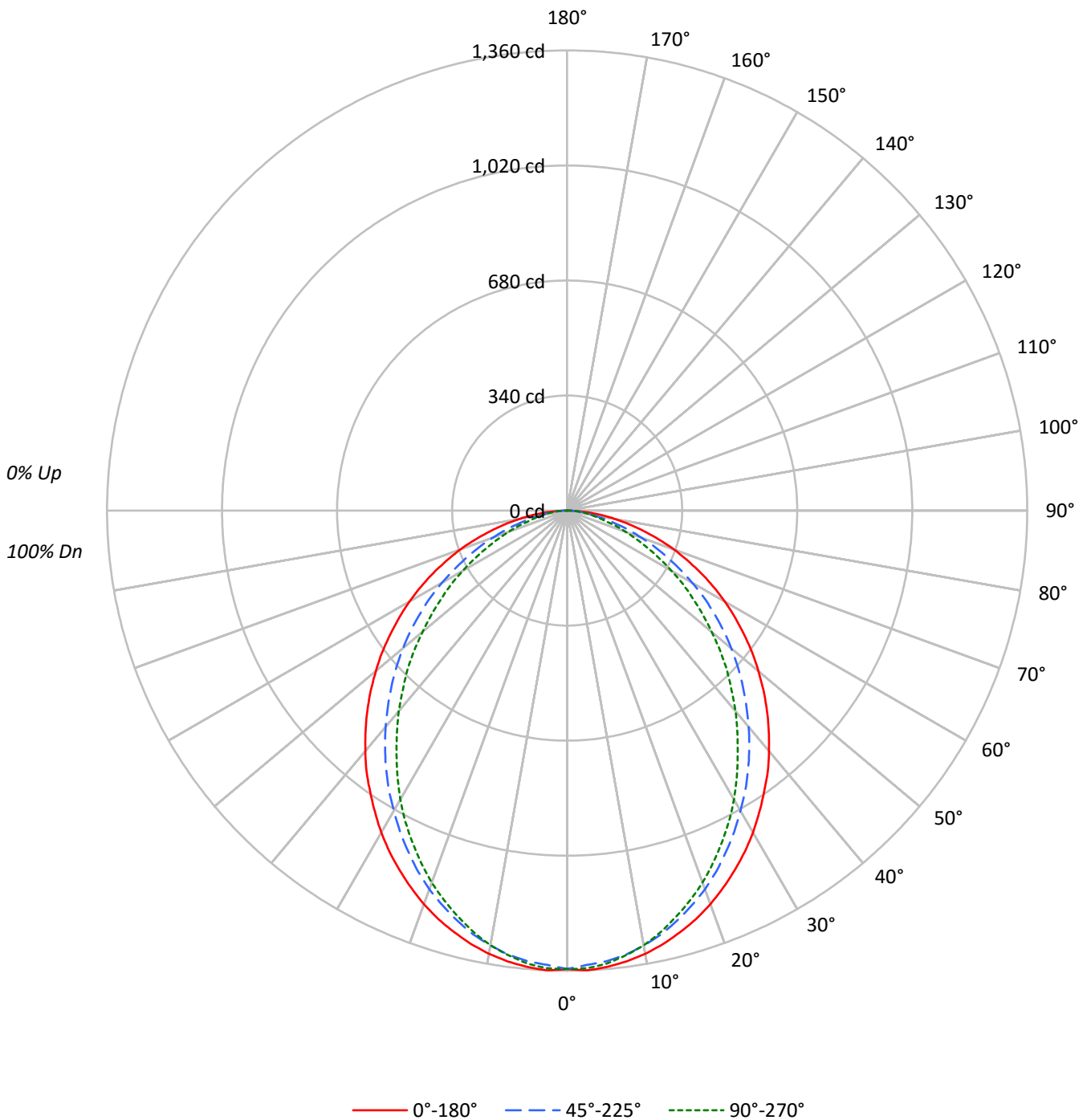
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	98	95	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	64	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	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	49	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11980	11980	11980
5°	12017	11866	11928
10°	11940	11716	11716
15°	11808	11487	11378
20°	11648	11206	11008
25°	11433	10848	10555
30°	11220	10454	10066
35°	10955	10070	9487
40°	10711	9637	8933
45°	10441	9178	8352
50°	10151	8707	7675
55°	9834	8170	6998
60°	9531	7551	6295
65°	9121	6820	5502
70°	8686	6023	4782
75°	8028	5022	3894
80°	7332	3920	3564
85°	6492	3753	3551



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.4	4.0
10°-20°	355.9	11.1
20°-30°	516.1	16.2
30°-40°	588.2	18.4
40°-50°	572.3	17.9
50°-60°	480.7	15.0
60°-70°	334.9	10.5
70°-80°	172.9	5.4
80°-90°	46.8	1.5
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°	999.4	31.3
0°-40°	1587.6	49.7
0°-60°	2640.6	82.6
0°-90°	3195.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3195.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1355	1355	1355	1355	1355	
5°	1354	1350	1337	1347	1344	128
15°	1290	1280	1255	1253	1243	364
25°	1172	1150	1112	1096	1082	540
35°	1015	984	933	898	879	635
45°	835	795	734	687	668	644
55°	638	597	530	476	454	571
65°	436	394	326	279	263	432
75°	235	199	147	123	114	250
85°	64	41	37	35	35	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1355	1355	1355	1355	1355
2.5°	1360	1356	1344	1355	1354
5°	1354	1350	1337	1347	1344
7.5°	1344	1339	1324	1331	1326
10°	1330	1325	1305	1310	1305
12.5°	1312	1305	1283	1284	1276
15°	1290	1280	1255	1253	1243
17.5°	1266	1253	1224	1219	1208
20°	1238	1222	1191	1180	1170
22.5°	1206	1187	1153	1140	1127
25°	1172	1150	1112	1096	1082
27.5°	1137	1111	1070	1050	1036
30°	1099	1069	1024	1001	986
32.5°	1057	1027	980	952	933
35°	1015	984	933	898	879
37.5°	974	939	884	848	826
40°	928	891	835	794	774
42.5°	882	844	784	741	719
45°	835	795	734	687	668
47.5°	787	747	684	635	613
50°	738	698	633	579	558
52.5°	690	648	583	528	506
55°	638	597	530	476	454
57.5°	588	545	480	425	407
60°	539	496	427	374	356
62.5°	487	444	376	325	309
65°	436	394	326	279	263
67.5°	384	346	280	235	222
70°	336	293	233	194	185
72.5°	285	247	189	157	150
75°	235	199	147	123	114
77.5°	189	154	111	91	91
80°	144	113	77	72	70
82.5°	102	73	57	53	52
85°	64	41	37	35	35
87.5°	31	19	19	18	18
90°	0	0	0	0	0

(END OF REPORT)