

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: G3-1802-639-84

Luminaire Tested: **S124DR-H795D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-84
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-H795D835-X4F0-XX-UDD-F-W
Description: DEFINE 4 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: 3163.9 lumens
Efficiency: N/A
Efficacy: 134.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

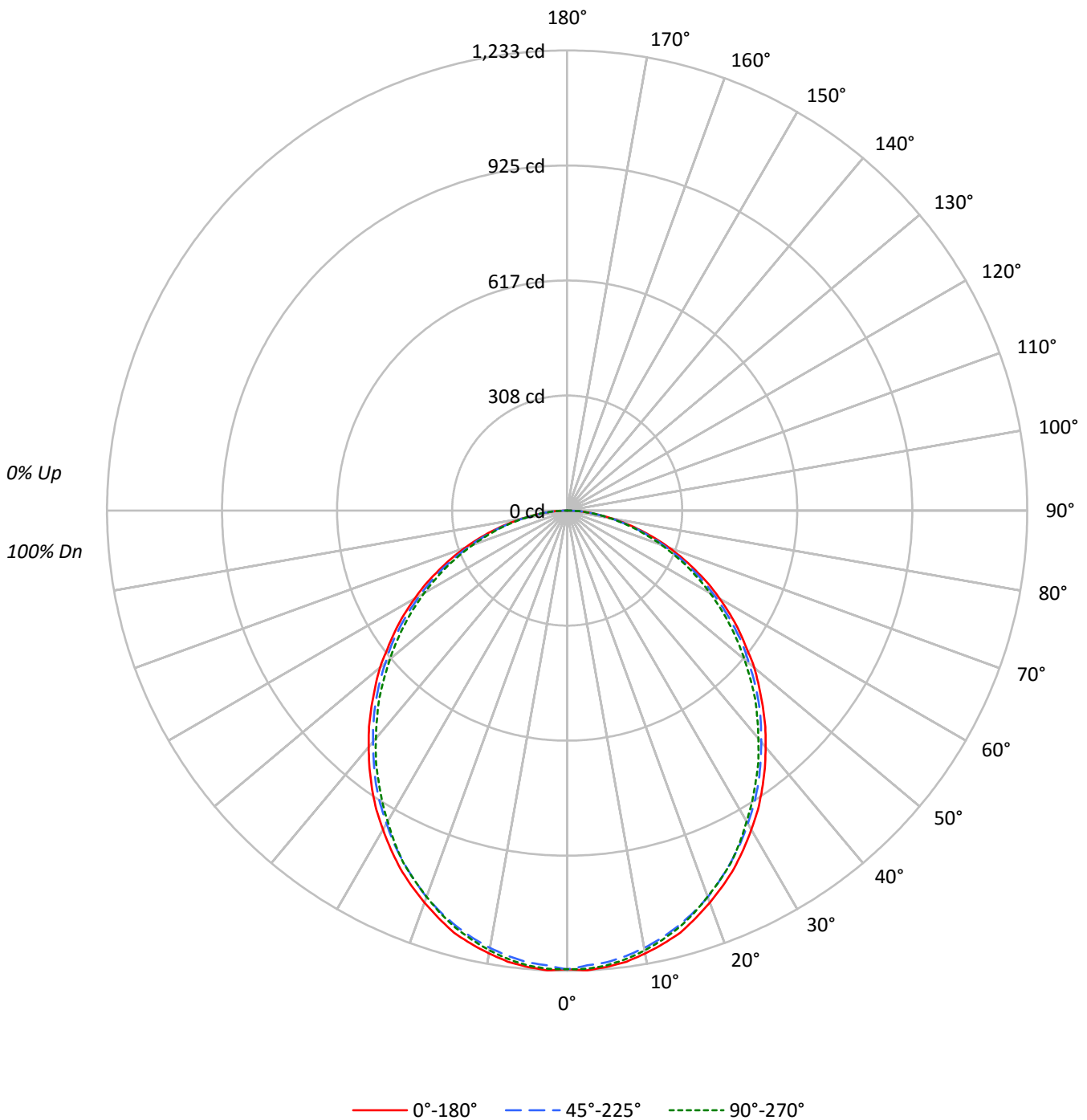
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	48	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°	10924	10924	10924
5°	10948	10841	10913
10°	10876	10741	10804
15°	10776	10601	10647
20°	10576	10424	10415
25°	10377	10190	10200
30°	10131	9936	9874
35°	9886	9690	9571
40°	9596	9387	9248
45°	9315	9126	8950
50°	9058	8795	8574
55°	8725	8493	8229
60°	8391	8107	7858
65°	7993	7719	7467
70°	7563	7225	6991
75°	6972	6697	6491
80°	6143	6040	5887
85°	5405	5405	5303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	3.7
10°-20°	326.7	10.3
20°-30°	481.1	15.2
30°-40°	559.7	17.7
40°-50°	560.0	17.7
50°-60°	489.8	15.5
60°-70°	363.7	11.5
70°-80°	207.2	6.6
80°-90°	59.7	1.9
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°	923.7	29.2
0°-40°	1483.4	46.9
0°-60°	2533.2	80.1
0°-90°	3163.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3163.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1229	1229	1229	1229	1229	
5°	1227	1225	1215	1224	1223	116
15°	1171	1165	1152	1159	1157	329
25°	1058	1053	1039	1042	1040	487
35°	911	903	893	885	882	570
45°	741	738	726	715	712	572
55°	563	559	548	536	531	503
65°	380	377	367	359	355	377
75°	203	199	195	191	189	215
85°	53	52	53	51	52	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1229	1229	1229	1229	1229
2.5°	1233	1230	1220	1230	1229
5°	1227	1225	1215	1224	1223
7.5°	1219	1215	1204	1213	1212
10°	1205	1202	1190	1199	1197
12.5°	1189	1186	1173	1180	1178
15°	1171	1165	1152	1159	1157
17.5°	1145	1141	1128	1134	1131
20°	1118	1113	1102	1103	1101
22.5°	1089	1084	1071	1075	1071
25°	1058	1053	1039	1042	1040
27.5°	1023	1018	1005	1006	1002
30°	987	981	968	967	962
32.5°	951	945	932	928	923
35°	911	903	893	885	882
37.5°	870	866	851	846	842
40°	827	823	809	802	797
42.5°	786	781	768	758	754
45°	741	738	726	715	712
47.5°	697	696	681	670	665
50°	655	649	636	626	620
52.5°	606	605	594	581	576
55°	563	559	548	536	531
57.5°	518	516	502	492	487
60°	472	468	456	447	442
62.5°	428	423	412	403	398
65°	380	377	367	359	355
67.5°	335	331	321	314	310
70°	291	285	278	272	269
72.5°	247	242	236	232	228
75°	203	199	195	191	189
77.5°	161	157	155	154	152
80°	120	118	118	117	115
82.5°	85	83	83	83	82
85°	53	52	53	51	52
87.5°	25	25	26	25	26
90°	0	0	0	0	0

(END OF REPORT)