

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: G3-1802-639-5

Luminaire Tested: **S124DR-S795D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-5
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-S795D835-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3203.2 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

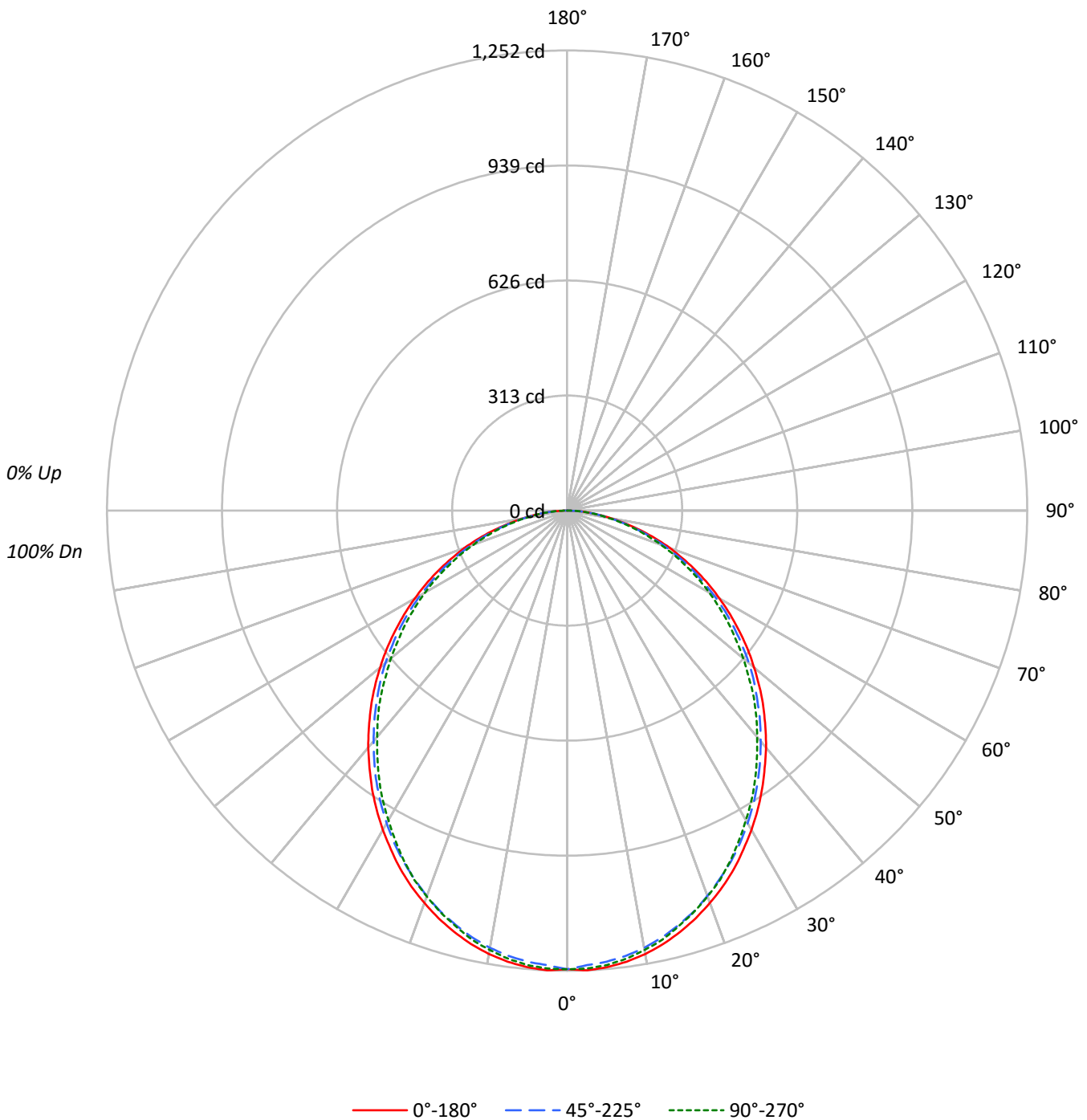
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	47	41	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	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	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11093	11093	11093
5°	11127	10993	11073
10°	11057	10903	10958
15°	10923	10748	10776
20°	10746	10557	10566
25°	10543	10337	10308
30°	10295	10079	9987
35°	10038	9810	9679
40°	9770	9503	9329
45°	9491	9202	9026
50°	9182	8933	8657
55°	8849	8586	8307
60°	8516	8196	7947
65°	8140	7824	7509
70°	7719	7329	7043
75°	7075	6731	6560
80°	6296	6040	5887
85°	5507	5303	5201



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.6	3.7
10°-20°	331.4	10.3
20°-30°	487.7	15.2
30°-40°	567.0	17.7
40°-50°	566.9	17.7
50°-60°	495.8	15.5
60°-70°	368.1	11.5
70°-80°	208.9	6.5
80°-90°	59.8	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°	936.8	29.2
0°-40°	1503.7	46.9
0°-60°	2566.4	80.1
0°-90°	3203.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3203.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1247	1243	1232	1243	1241	118
15°	1187	1183	1168	1174	1171	335
25°	1075	1068	1054	1055	1051	495
35°	925	918	904	897	892	578
45°	755	748	732	721	718	582
55°	571	568	554	542	536	511
65°	387	382	372	362	357	383
75°	206	201	196	192	191	219
85°	54	54	52	52	51	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1248	1248	1248	1248	1248
2.5°	1252	1249	1238	1248	1247
5°	1247	1243	1232	1243	1241
7.5°	1238	1234	1222	1231	1230
10°	1225	1221	1208	1216	1214
12.5°	1208	1204	1190	1199	1196
15°	1187	1183	1168	1174	1171
17.5°	1163	1158	1144	1148	1146
20°	1136	1131	1116	1119	1117
22.5°	1107	1100	1085	1091	1087
25°	1075	1068	1054	1055	1051
27.5°	1039	1032	1019	1017	1012
30°	1003	995	982	978	973
32.5°	965	958	944	939	934
35°	925	918	904	897	892
37.5°	883	877	862	855	848
40°	842	834	819	809	804
42.5°	798	794	777	765	762
45°	755	748	732	721	718
47.5°	710	705	690	678	670
50°	664	660	646	632	626
52.5°	619	614	599	587	579
55°	571	568	554	542	536
57.5°	526	523	509	497	491
60°	479	474	461	452	447
62.5°	433	429	415	407	402
65°	387	382	372	362	357
67.5°	340	336	326	316	315
70°	297	290	282	274	271
72.5°	251	244	238	232	229
75°	206	201	196	192	191
77.5°	162	160	155	154	151
80°	123	120	118	116	115
82.5°	85	84	84	83	82
85°	54	54	52	52	51
87.5°	26	25	24	24	24
90°	0	0	0	0	0

(END OF REPORT)