

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: P242610

Luminaire Tested: **S124DR-S795D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242610
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-S795D840-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3234.8 lumens
Efficiency: N/A
Efficacy: 123.5 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

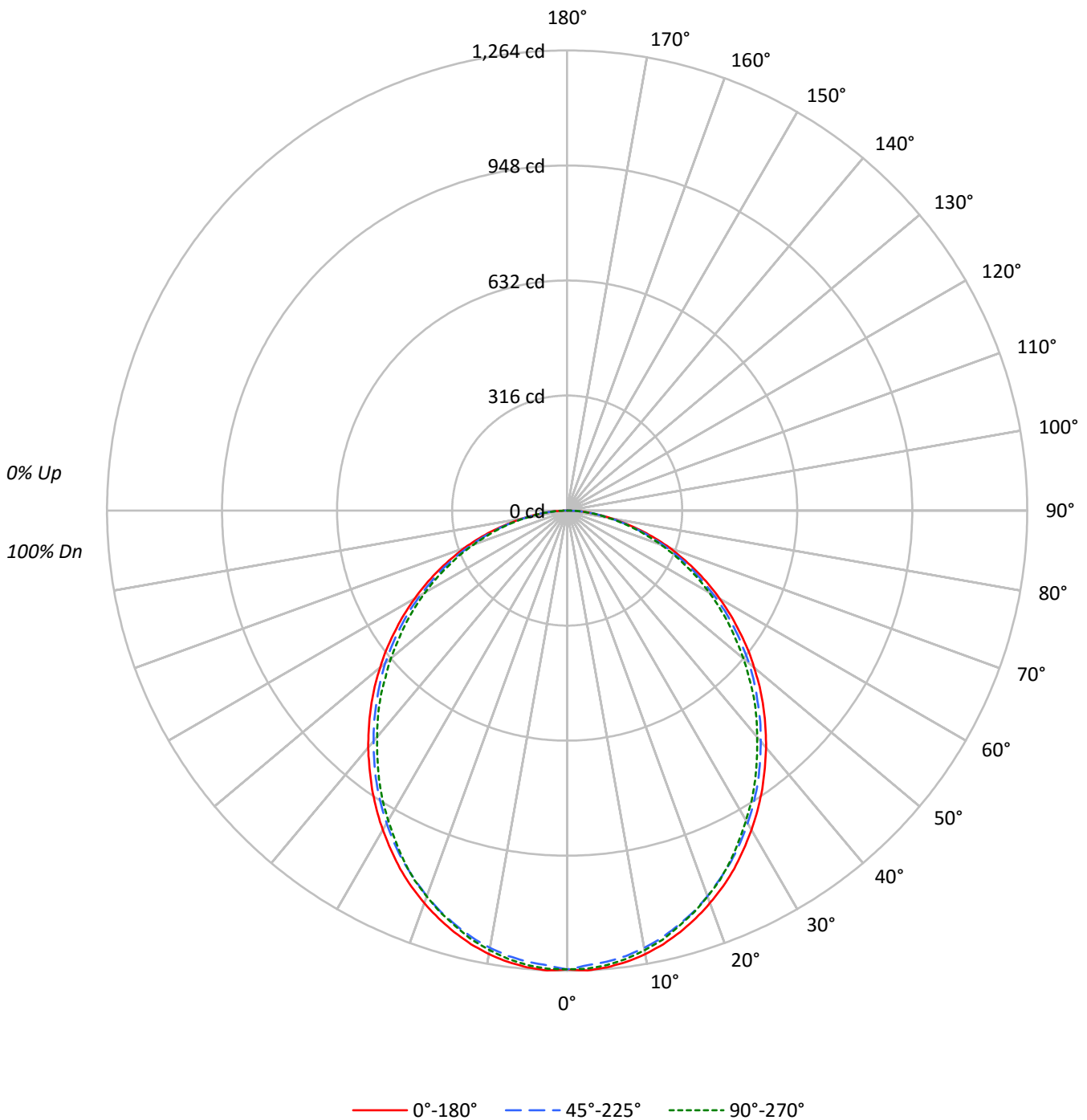
Input Watts (W): 26.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11203	11203	11203
5°	11237	11102	11182
10°	11166	11011	11066
15°	11031	10854	10883
20°	10852	10661	10670
25°	10647	10439	10410
30°	10396	10179	10085
35°	10136	9906	9775
40°	9867	9597	9421
45°	9584	9292	9115
50°	9274	9022	8742
55°	8936	8671	8389
60°	8599	8276	8025
65°	8220	7902	7582
70°	7794	7402	7113
75°	7144	6797	6625
80°	6358	6102	5943
85°	5558	5354	5252



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.8	3.7
10°-20°	334.7	10.3
20°-30°	492.5	15.2
30°-40°	572.6	17.7
40°-50°	572.5	17.7
50°-60°	500.7	15.5
60°-70°	371.7	11.5
70°-80°	210.9	6.5
80°-90°	60.4	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°	946.0	29.2
0°-40°	1518.6	46.9
0°-60°	2591.8	80.1
0°-90°	3234.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3234.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1260	1260	1260	1260	1260	
5°	1259	1255	1244	1255	1253	119
15°	1199	1195	1180	1186	1183	338
25°	1086	1078	1064	1065	1061	500
35°	934	927	913	906	901	584
45°	762	755	739	728	725	588
55°	577	574	560	547	541	517
65°	391	386	376	366	360	387
75°	208	203	198	194	193	221
85°	54	54	52	52	52	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1260.3	1260.3	1260.3	1260.3	1260.3
2.5°	1264.4	1261.3	1250.2	1260.3	1259.3
5°	1259.3	1255.3	1244.2	1255.3	1253.2
7.5°	1250.2	1246.2	1234.1	1243.1	1242.1
10°	1237.1	1233.0	1219.9	1228.0	1226.0
12.5°	1219.9	1215.9	1201.7	1210.8	1207.8
15°	1198.7	1194.7	1179.5	1185.6	1182.6
17.5°	1174.5	1169.4	1155.3	1159.3	1157.3
20°	1147.2	1142.2	1127.0	1130.0	1128.0
22.5°	1117.9	1110.9	1095.7	1101.8	1097.7
25°	1085.6	1078.5	1064.4	1065.4	1061.4
27.5°	1049.3	1042.2	1029.1	1027.0	1022.0
30°	1012.9	1004.8	991.7	987.6	982.6
32.5°	974.5	967.5	953.3	948.3	943.2
35°	934.1	927.1	912.9	905.9	900.8
37.5°	891.7	885.7	870.5	863.4	856.4
40°	850.3	842.2	827.1	817.0	811.9
42.5°	805.9	801.8	784.7	772.5	769.5
45°	762.4	755.4	739.2	728.1	725.1
47.5°	717.0	712.0	696.8	684.7	676.6
50°	670.6	666.5	652.4	638.2	632.2
52.5°	625.1	620.1	604.9	592.8	584.7
55°	576.6	573.6	559.5	547.3	541.3
57.5°	531.2	528.2	514.0	501.9	495.8
60°	483.7	478.7	465.5	456.5	451.4
62.5°	437.3	433.2	419.1	411.0	406.0
65°	390.8	385.8	375.7	365.6	360.5
67.5°	343.4	339.3	329.2	319.1	318.1
70°	299.9	292.9	284.8	276.7	273.7
72.5°	253.5	246.4	240.3	234.3	231.3
75°	208.0	203.0	197.9	193.9	192.9
77.5°	163.6	161.6	156.5	155.5	152.5
80°	124.2	121.2	119.2	117.1	116.1
82.5°	85.8	84.8	84.8	83.8	82.8
85°	54.5	54.5	52.5	52.5	51.5
87.5°	26.3	25.2	24.2	24.2	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)