

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: P243487

Luminaire Tested: **S124DR-H1195D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243487
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-84)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-H1195D940-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4250.3 lumens
Efficiency: N/A
Efficacy: 112.7 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

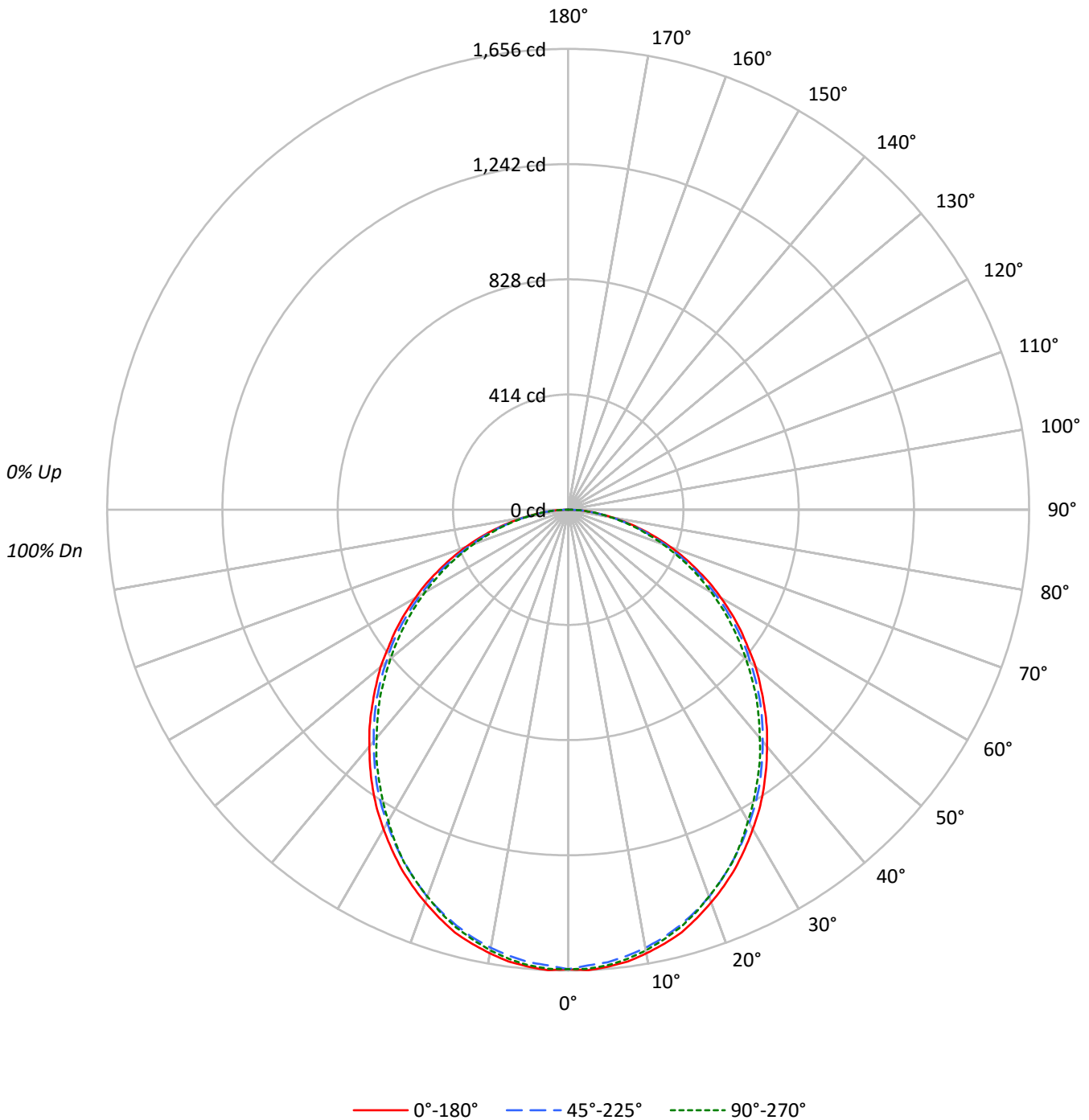
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	14676	14676	14676
5°	14708	14564	14660
10°	14611	14429	14514
15°	14476	14242	14303
20°	14207	14004	13991
25°	13940	13690	13703
30°	13609	13347	13264
35°	13280	13017	12858
40°	12892	12611	12424
45°	12514	12260	12024
50°	12168	11815	11518
55°	11721	11409	11054
60°	11273	10891	10556
65°	10737	10369	10031
70°	10159	9707	9393
75°	9366	8998	8720
80°	8252	8113	7909
85°	7262	7262	7129



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.7	3.7
10°-20°	438.9	10.3
20°-30°	646.3	15.2
30°-40°	752.0	17.7
40°-50°	752.3	17.7
50°-60°	657.9	15.5
60°-70°	488.7	11.5
70°-80°	278.4	6.6
80°-90°	80.2	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°	1240.9	29.2
0°-40°	1992.8	46.9
0°-60°	3403.0	80.1
0°-90°	4250.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4250.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1651	1651	1651	1651	1651	
5°	1648	1646	1632	1644	1643	156
15°	1573	1565	1548	1557	1554	443
25°	1421	1415	1396	1400	1397	654
35°	1224	1213	1200	1189	1185	765
45°	996	991	975	960	956	769
55°	756	751	736	720	713	676
65°	510	506	493	482	477	507
75°	273	267	262	257	254	289
85°	71	70	71	68	70	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1651.0	1651.0	1651.0	1651.0	1651.0
2.5°	1656.4	1652.4	1638.9	1652.4	1651.0
5°	1648.3	1645.7	1632.2	1644.3	1643.0
7.5°	1637.6	1632.2	1617.4	1629.5	1628.2
10°	1618.8	1614.8	1598.6	1610.7	1608.0
12.5°	1597.3	1593.3	1575.8	1585.2	1582.5
15°	1573.1	1565.0	1547.6	1557.0	1554.3
17.5°	1538.2	1532.8	1515.3	1523.4	1519.4
20°	1501.9	1495.2	1480.4	1481.8	1479.1
22.5°	1463.0	1456.2	1438.8	1444.1	1438.8
25°	1421.3	1414.6	1395.8	1399.8	1397.1
27.5°	1374.3	1367.6	1350.1	1351.5	1346.1
30°	1325.9	1317.9	1300.4	1299.1	1292.3
32.5°	1277.6	1269.5	1252.0	1246.7	1239.9
35°	1223.8	1213.1	1199.6	1188.9	1184.9
37.5°	1168.7	1163.4	1143.2	1136.5	1131.1
40°	1111.0	1105.6	1086.8	1077.4	1070.7
42.5°	1055.9	1049.2	1031.7	1018.3	1012.9
45°	995.5	991.4	975.3	960.5	956.5
47.5°	936.3	935.0	914.8	900.1	893.4
50°	879.9	871.9	854.4	841.0	832.9
52.5°	814.1	812.8	798.0	780.5	773.8
55°	756.3	751.0	736.2	720.1	713.3
57.5°	695.9	693.2	674.4	660.9	654.2
60°	634.1	628.7	612.6	600.5	593.8
62.5°	575.0	568.3	553.5	541.4	534.7
65°	510.5	506.5	493.0	482.3	476.9
67.5°	450.0	444.7	431.2	421.8	416.5
70°	390.9	382.9	373.5	365.4	361.4
72.5°	331.8	325.1	317.0	311.7	306.3
75°	272.7	267.3	262.0	256.6	253.9
77.5°	216.3	210.9	208.2	206.9	204.2
80°	161.2	158.5	158.5	157.2	154.5
82.5°	114.2	111.5	111.5	111.5	110.2
85°	71.2	69.9	71.2	68.5	69.9
87.5°	33.6	33.6	34.9	33.6	34.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)