

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P982513

Luminaire Tested: DTR3-DR-4F0-065D-940-FLL-D

Issue Date: 1/22/2025

Test Information

Test Method: LM-79-2019
Report Number: P982513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2501-325-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/22/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: DTR3-DR-4F0-065D-940-FLL-D
Description: Define Torrent LED Luminaire
Light Source: -
Ballast/Driver: -

Summary

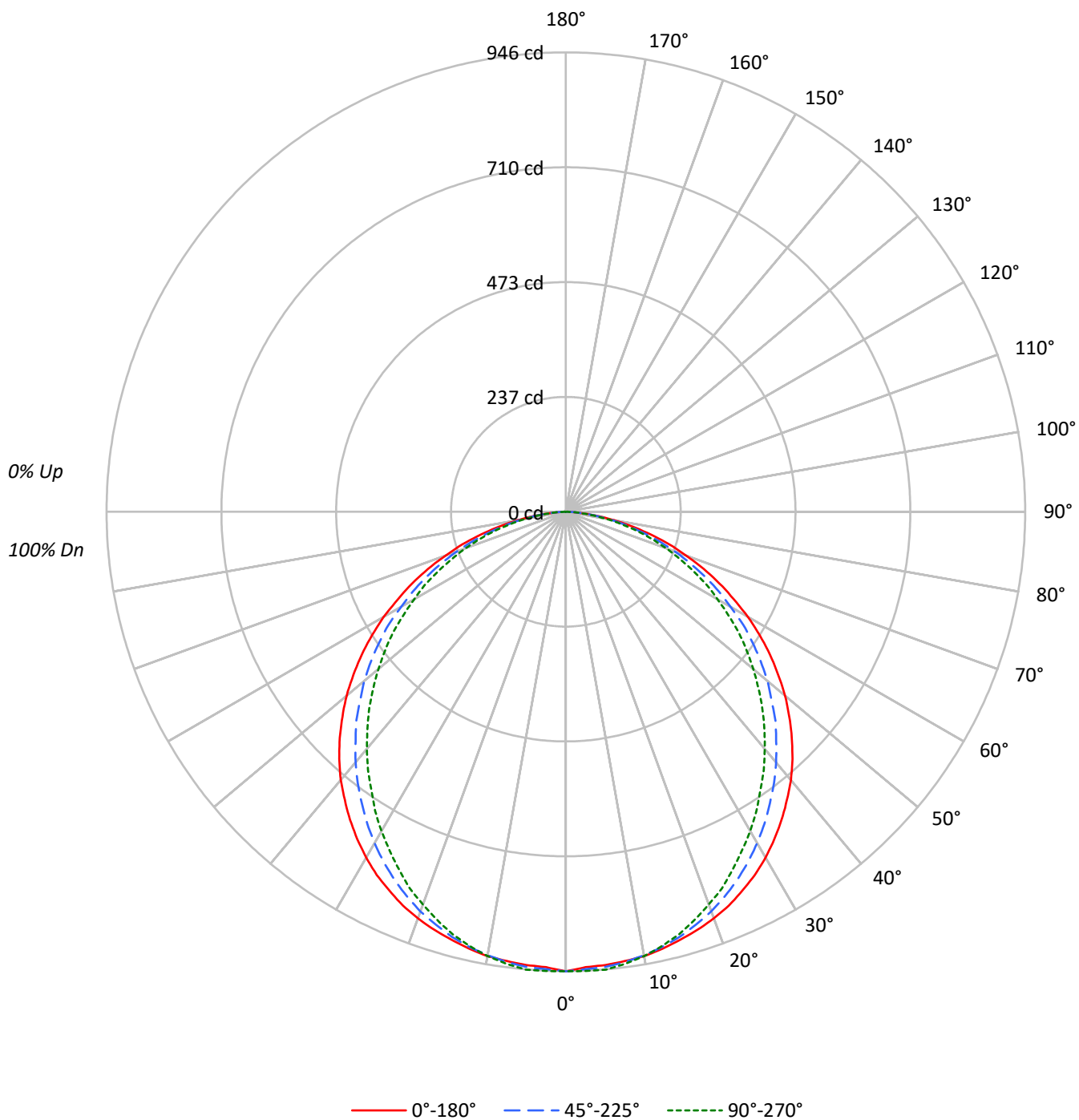
Lumens per Lamp: N/A
Luminaire Lumens: 2614.5 lumens
Efficiency: N/A
Efficacy: 66.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.2 / 1.35
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 39.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9909
Total Harmonic Distortion (THDi): 8.21
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	84	78	96	89	83	77	85	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70
4	83	71	62	55	80	69	61	55	67	60	54		65	58	53		62
5	76	63	54	48	74	62	54	47	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	41	54	47	41		53	46	41		51
7	65	52	43	37	63	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	46	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	29	42	34	29		40	34	29		39
10	53	40	32	27	52	39	32	27	38	31	27		37	31	26		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10187	10187	10187
5°	10122	10164	10226
10°	10156	10135	10156
15°	10164	10099	10036
20°	10207	10032	9858
25°	10221	9925	9653
30°	10220	9794	9439
35°	10180	9628	9177
40°	10134	9464	8955
45°	10021	9295	8713
50°	9873	9074	8436
55°	9633	8809	8163
60°	9326	8422	7765
65°	8894	8066	7389
70°	8286	7506	6905
75°	7536	6746	6267
80°	6267	5678	5207
85°	4248	4248	3767

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10021 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.6	3.4
10°-20°	256.0	9.8
20°-30°	385.7	14.8
30°-40°	460.3	17.6
40°-50°	472.4	18.1
50°-60°	421.2	16.1
60°-70°	314.4	12.0
70°-80°	173.7	6.6
80°-90°	41.2	1.6
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°	731.3	28.0
0°-40°	1191.6	45.6
0°-60°	2085.2	79.8
0°-90°	2614.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2614.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	937	948	941	941	946	89
15°	912	920	906	899	901	258
25°	861	861	836	815	813	397
35°	775	765	733	708	698	485
45°	658	645	611	582	572	507
55°	513	500	469	444	435	458
65°	349	338	317	298	290	345
75°	181	174	162	155	151	191
85°	34	34	34	32	30	44
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.4	946.4	946.4	946.4	946.4
2.5°	938.7	950.2	942.6	944.5	946.4
5°	936.8	948.3	940.7	940.7	946.4
7.5°	933.1	944.5	934.9	933.1	938.7
10°	929.2	938.7	927.3	923.5	929.2
12.5°	921.6	929.2	917.8	912.1	915.8
15°	912.1	919.7	906.3	898.7	900.6
17.5°	902.5	908.2	891.1	881.5	881.5
20°	891.1	893.0	875.8	862.5	860.6
22.5°	877.7	879.6	856.7	839.6	839.6
25°	860.6	860.6	835.7	814.7	812.8
27.5°	843.3	839.6	812.8	791.8	786.1
30°	822.3	816.6	788.0	765.1	759.4
32.5°	799.5	791.8	761.3	736.5	730.7
35°	774.7	765.1	732.7	707.9	698.4
37.5°	748.0	736.5	704.1	677.4	669.7
40°	721.2	707.9	673.5	646.9	637.3
42.5°	690.7	677.4	641.1	614.4	604.9
45°	658.3	644.9	610.6	582.0	572.4
47.5°	623.9	610.6	574.3	547.6	538.0
50°	589.6	574.3	541.9	513.3	503.8
52.5°	551.4	538.0	505.6	478.9	469.4
55°	513.3	499.9	469.4	444.5	435.0
57.5°	473.2	461.8	433.2	406.4	396.9
60°	433.2	419.8	391.2	370.2	360.7
62.5°	389.3	377.8	354.9	333.9	328.2
65°	349.2	337.7	316.7	297.7	290.1
67.5°	307.2	297.7	276.7	261.4	253.8
70°	263.3	255.7	238.5	225.2	219.4
72.5°	223.2	213.7	200.3	188.9	185.1
75°	181.2	173.6	162.2	154.6	150.7
77.5°	139.3	133.6	126.0	120.2	116.4
80°	101.1	95.4	91.6	87.7	84.0
82.5°	64.9	61.1	61.1	57.2	55.4
85°	34.4	34.4	34.4	32.5	30.5
87.5°	11.5	13.4	13.4	11.5	11.5
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	20.17	21.80	20.54	22.11	22.43	19.22	20.85	19.59	21.17	21.48
	3H	21.95	23.42	22.32	23.75	24.11	20.94	22.41	21.31	22.74	23.10
	4H	22.59	23.97	22.99	24.32	24.70	21.56	22.94	21.96	23.29	23.67
	6H	23.01	24.30	23.43	24.66	25.05	21.97	23.26	22.38	23.62	24.01
	8H	23.13	24.35	23.55	24.74	25.14	22.09	23.31	22.51	23.70	24.10
	12H	23.18	24.36	23.61	24.74	25.17	22.15	23.32	22.57	23.70	24.13
4H	2H	20.69	22.08	21.09	22.43	22.80	19.94	21.33	20.34	21.67	22.05
	3H	22.69	23.85	23.10	24.25	24.65	21.86	23.02	22.27	23.42	23.82
	4H	23.46	24.51	23.89	24.92	25.35	22.59	23.64	23.02	24.05	24.49
	6H	24.00	24.92	24.45	25.36	25.81	23.12	24.03	23.57	24.47	24.93
	8H	24.15	25.01	24.61	25.45	25.91	23.26	24.12	23.72	24.56	25.03
	12H	24.24	25.01	24.72	25.48	25.95	23.35	24.12	23.83	24.60	25.07
8H	4H	23.69	24.55	24.15	24.99	25.46	22.92	23.78	23.38	24.22	24.69
	6H	24.33	25.04	24.83	25.53	26.01	23.55	24.26	24.04	24.75	25.23
	8H	24.54	25.17	25.04	25.68	26.17	23.75	24.39	24.26	24.90	25.38
	12H	24.68	25.24	25.18	25.73	26.29	23.90	24.46	24.41	24.95	25.51
12H	4H	23.71	24.48	24.19	24.95	25.42	22.96	23.73	23.44	24.20	24.67
	6H	24.36	25.00	24.87	25.51	25.99	23.60	24.24	24.11	24.75	25.23
	8H	24.61	25.17	25.12	25.66	26.23	23.86	24.42	24.36	24.91	25.47