

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge
or Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 765564

Luminaire Tested: **GMX40SXX5DFG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 765564
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GMX40SXX5DFG
Description: 400W HPS TYPE V AREA
Light Source: 400W HPS CL E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 50000 (1 lamp)
Luminaire Lumens: 38649.2 lumens
Efficiency: 77.3%
Efficacy: 83.1 lumens/watt
Luminous Opening: (L: 0 ' x W: -2.1 ' x H: 1.3 '
IES Classification: Type III - Short - Cutoff
BUG Rating: B5 - U2 - G5

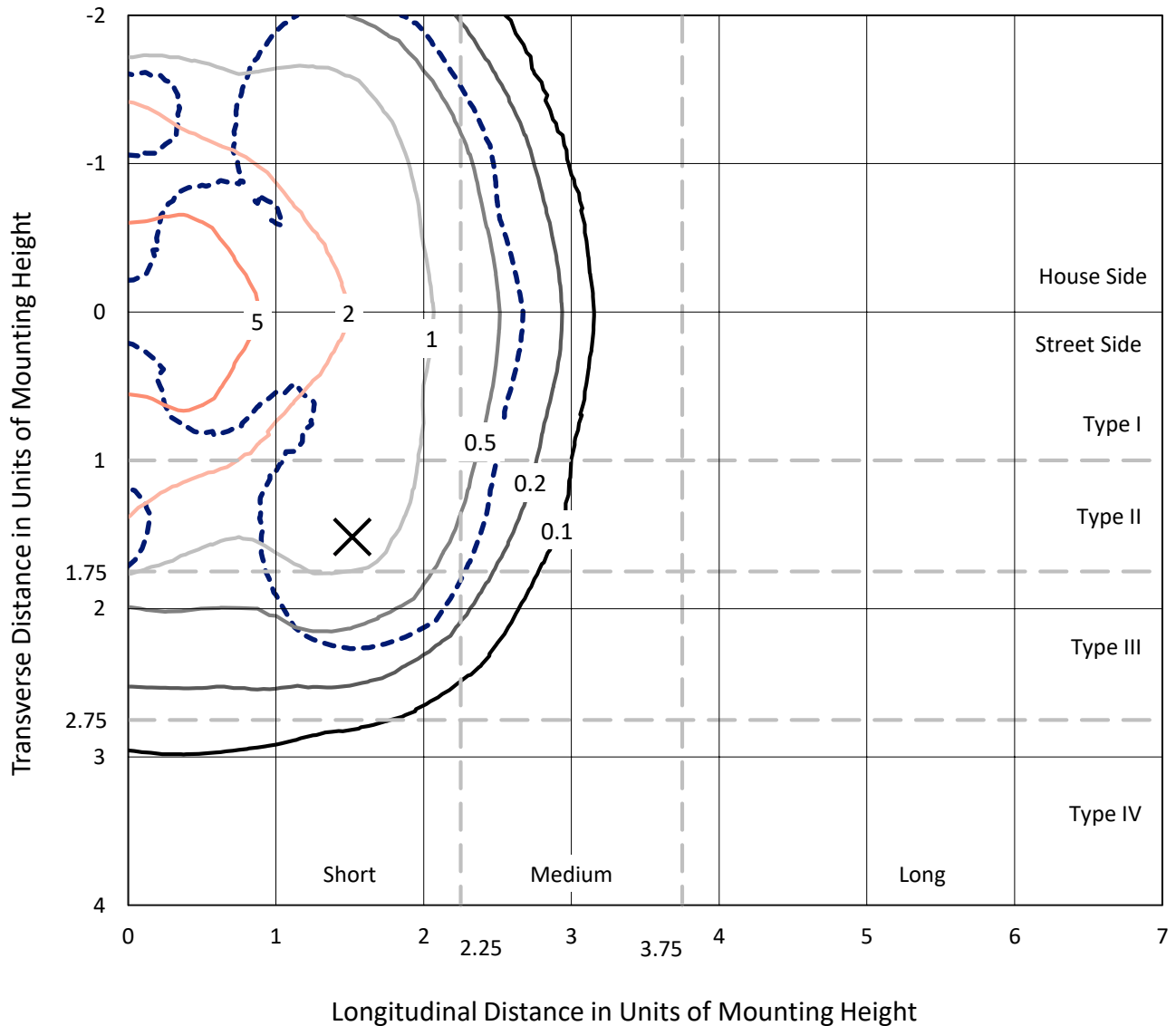
Input Watts (W): 465
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: 765564
 CATALOG NUMBER: GMX40SXX5DFG

Iso-Footcandle Lines of Horizontal Illumination

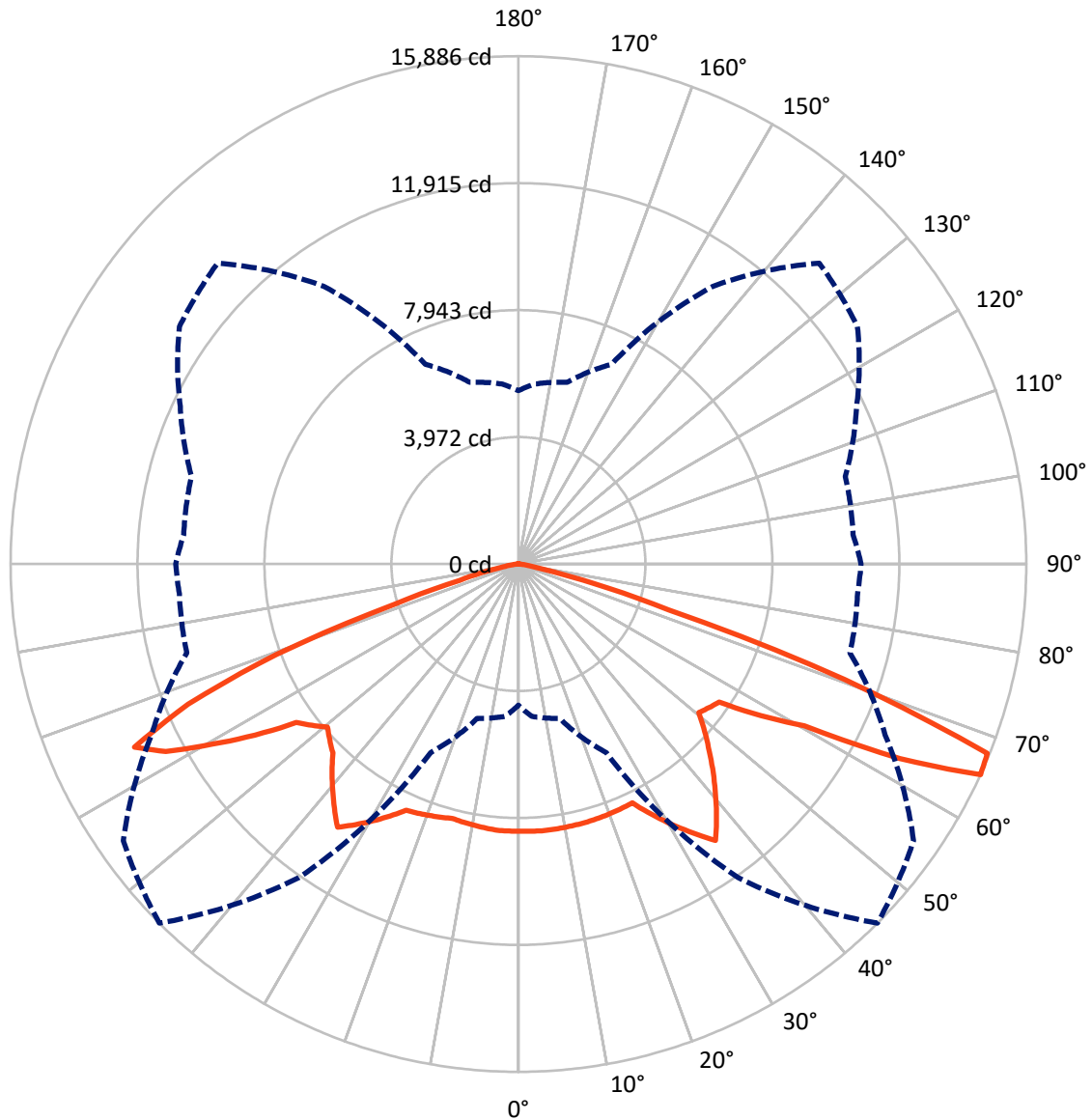
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.3 fc
 Type III - Short - Cutoff

REPORT NUMBER: 765564
CATALOG NUMBER: GMX40SXX5DFG

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: 765564

CATALOG NUMBER: GMX40SXX5DFG

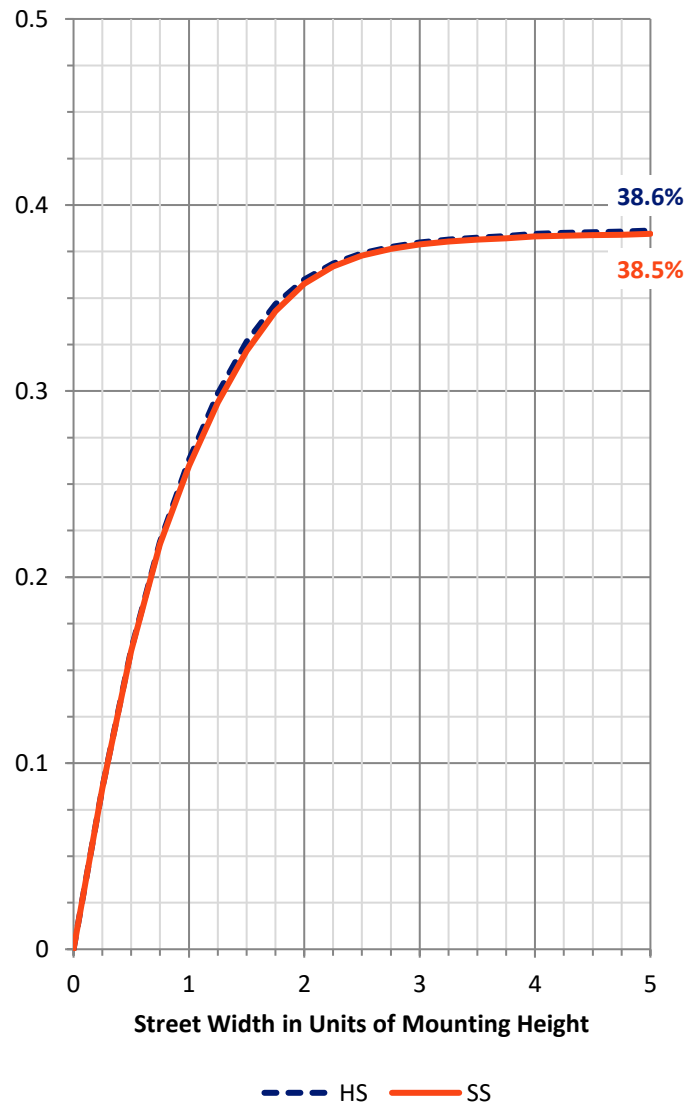
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	19363.3	34.0	19397.3
	% Lamp	38.7	0.1	38.8
Street Side	Lumens	19214.7	37.2	19251.9
	% Lamp	38.4	0.1	38.5
Total	Lumens	38578.0	71.2	38649.2
	% Lamp	77.2	0.1	77.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	796.6	2.1	1.6
10°-20°	2343.9	6.1	4.7
20°-30°	3908.3	10.1	7.8
30°-40°	5487.1	14.2	11.0
40°-50°	6464.4	16.7	12.9
50°-60°	7619.1	19.7	15.2
60°-70°	9186.8	23.8	18.4
70°-80°	2496.2	6.5	5.0
80°-90°	144.5	0.4	0.3
90°-100°	29.1	0.1	0.1
100°-110°	24.3	0.1	0.0
110°-120°	14.6	0.0	0.0
120°-130°	4.3	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	38578.0	99.8	77.2
0°-180°	38649.2	100.0	77.3



REPORT NUMBER: 765564

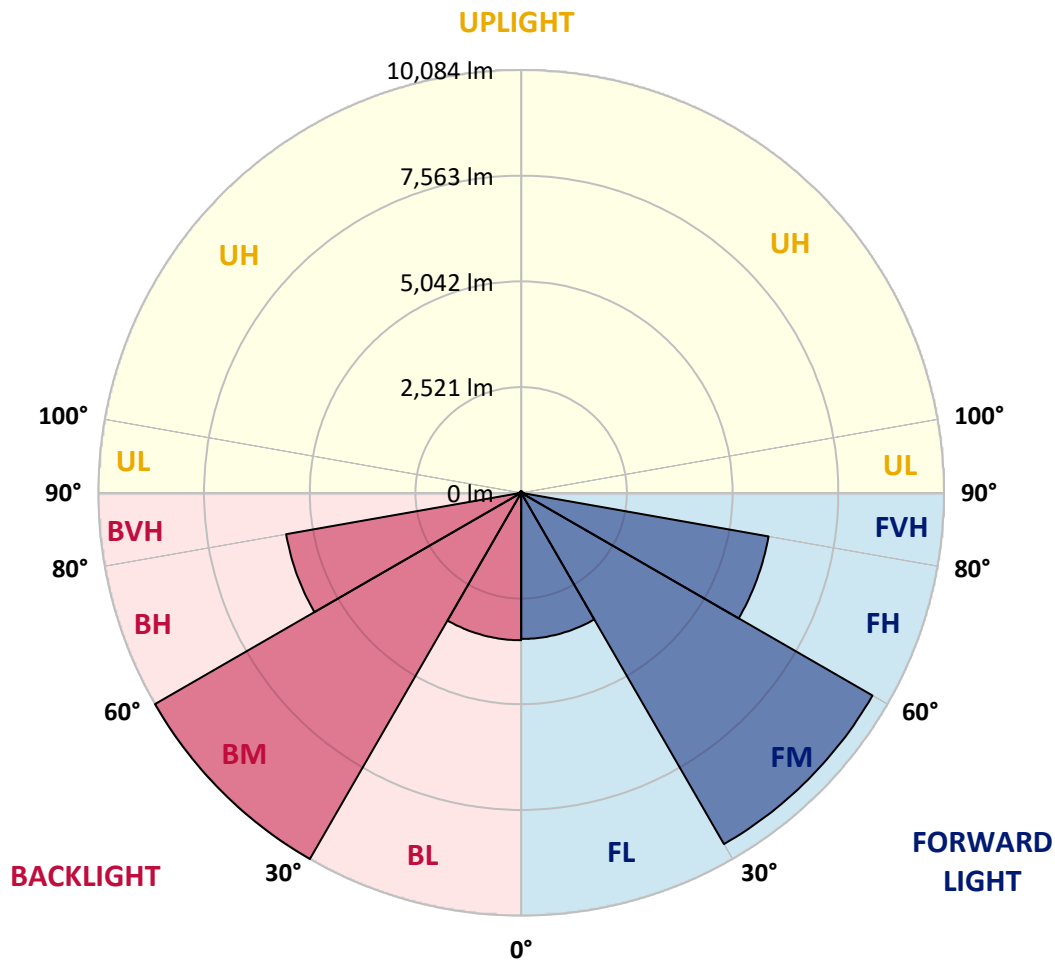
CATALOG NUMBER: GMX40SXX5DFG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3485.9	7.0			
FM	(30°-60°)	9673.6	19.3			
FH	(60°-80°)	5990.6	12.0			G3/7500
FVH	(80°-90°)	69.5	0.1			G1/100
BL	(0°-30°)	3515.3	7.0	B4/5000		
BM	(30°-60°)	10084.3	20.2	B5		
BH	(60°-80°)	5692.4	11.4	B5		G5
BVH	(80°-90°)	75.1	0.2			G1/100
UL	(90°-100°)	29.1	0.1		U2/50	
UH	(100°-180°)	34.0	0.1		U2/50	
Trapped Light		11350.8	22.7			

BUG Rating: B5-U2-G5

Type III Short





REPORT NUMBER: 765564

CATALOG NUMBER: GMX40SXX5DFG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8356	8356	8356	8356	8356	8356	8356	8356	8356	8356	8356
5°	8392	8381	8342	8350	8360	8379	8382	8392	8406	8415	8425
15°	7707	7690	7796	7988	8173	8347	8472	8541	8653	8702	8700
25°	7021	7013	7381	7686	8026	8279	8423	8606	8859	8949	8971
35°	6211	6255	6875	8521	10272	10622	10031	9644	9586	9679	9835
45°	6765	6698	6673	7162	7870	8373	8537	9105	10298	11240	11307
50°	7916	7683	6932	6943	7277	7311	7199	7755	8481	9133	9061
55°	9211	8151	6734	6626	7406	7618	7380	7958	9062	9767	10017
60°	8010	7216	6548	6567	8556	10279	10750	10780	10636	11580	11867
62.5°	5149	5547	6267	6712	10288	13398	13544	12074	10868	11058	11152
65°	4416	4782	5000	6508	11973	15886	15088	12661	10736	10646	10718
67.5°	3780	3875	4254	6143	12297	15818	14058	10915	9929	9554	9591
70°	3262	3334	3697	4713	8145	10830	9233	7595	6941	7467	7490
72.5°	2225	2499	2692	2988	4346	4919	4177	3899	2816	2939	2944
75°	1475	1513	1615	1470	2002	2390	2159	1547	1428	1557	1581
77.5°	1113	1135	1205	789	698	789	911	811	798	774	787
80°	589	664	527	419	380	392	372	409	355	347	418
82.5°	291	250	237	200	210	172	153	135	141	162	163
85°	79	103	91	85	90	63	66	54	54	59	41
87.5°	41	50	43	43	37	25	16	19	13	4	9
90°	44	56	43	35	35	13	3	3	3	1	1
95°	77	81	77	59	56	29	9	1	1	1	0
105°	32	38	34	52	50	21	7	3	6	6	1
115°	18	22	13	15	19	10	12	16	21	13	9
125°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: 765564

CATALOG NUMBER: GMX40SXX5DFG

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8356	8356	8356	8356	8356	8356	8356	8356	8356	8356
5°	8400	8384	8397	8366	8356	8353	8342	8359	8363	8407
15°	8687	8588	8434	8329	8222	8058	7917	7808	7755	7715
25°	8994	9017	8852	8622	8466	8189	7917	7608	7403	7371
35°	9800	9772	9747	9854	9992	9605	8479	7455	7000	6982
45°	11243	10356	9212	8432	8281	8004	7680	7468	7493	7465
50°	9015	8599	7910	7690	7854	7823	7626	7811	8635	8934
55°	9801	9433	8884	8594	8534	8157	7543	7811	9077	9688
60°	11526	10859	10883	11423	11105	9368	7545	7453	7330	6832
62.5°	10884	10834	11866	12543	12489	10194	7420	6928	6232	6020
65°	10510	10588	11673	12945	13307	10599	6891	5881	5649	5422
67.5°	9407	9304	10293	11389	11229	8972	6110	4711	4535	4577
70°	7277	6782	7545	7611	8077	6553	4513	3878	3750	3724
72.5°	2880	2920	3064	3615	4083	3896	2947	2895	2814	2770
75°	1522	1513	1790	2055	1893	1609	1620	1660	1822	1943
77.5°	868	899	855	977	1033	966	888	1147	1244	1242
80°	339	402	381	440	471	518	465	570	737	739
82.5°	159	166	187	218	205	190	185	215	275	221
85°	59	53	62	75	91	91	88	97	87	88
87.5°	12	19	13	19	26	41	41	46	34	35
90°	3	9	6	4	9	24	22	34	21	15
95°	1	6	4	6	22	50	44	69	54	50
105°	3	7	4	7	15	26	29	29	37	35
115°	10	22	21	16	15	22	26	32	44	41
125°	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)