

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: ITL53970_350MP

Luminaire Tested: **GMX35PXX3SFHS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: ITL53970_350MP
Test Lab: INDEPENDENT TESTING LABORATORIES, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GMX35PXX3SFHS
Description: 400W MH TYPE III AREA
WITH HOUSE SIDE SHIELD
Light Source: 350 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 33000 (1 lamp)
Luminaire Lumens: 17722.7 lumens
Efficiency: 53.7%
Efficacy: 44.6 lumens/watt
Luminous Opening: Circular (Dia: 1.74' x H: 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B2 - U0 - G3

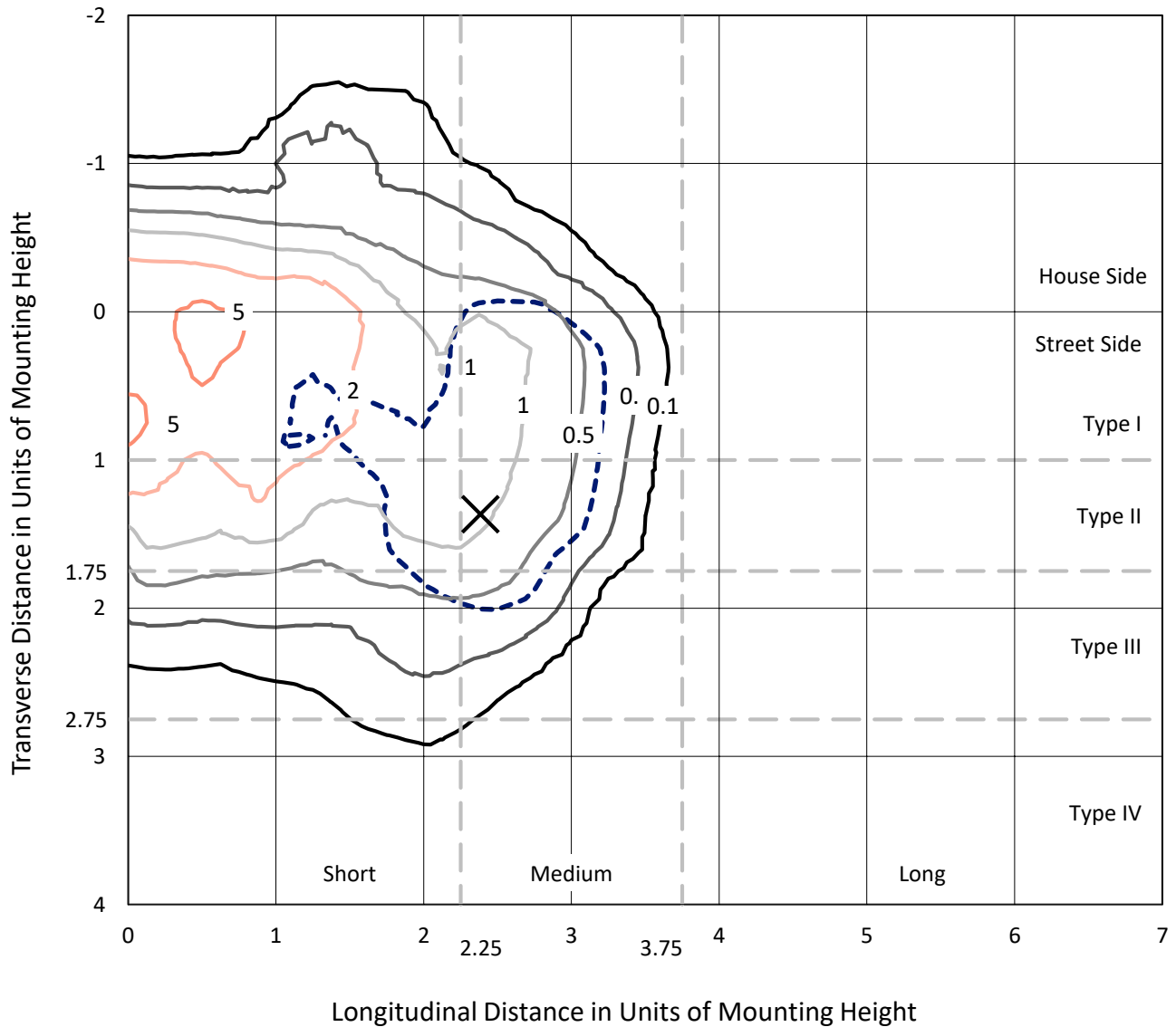
Input Watts (W): 397
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

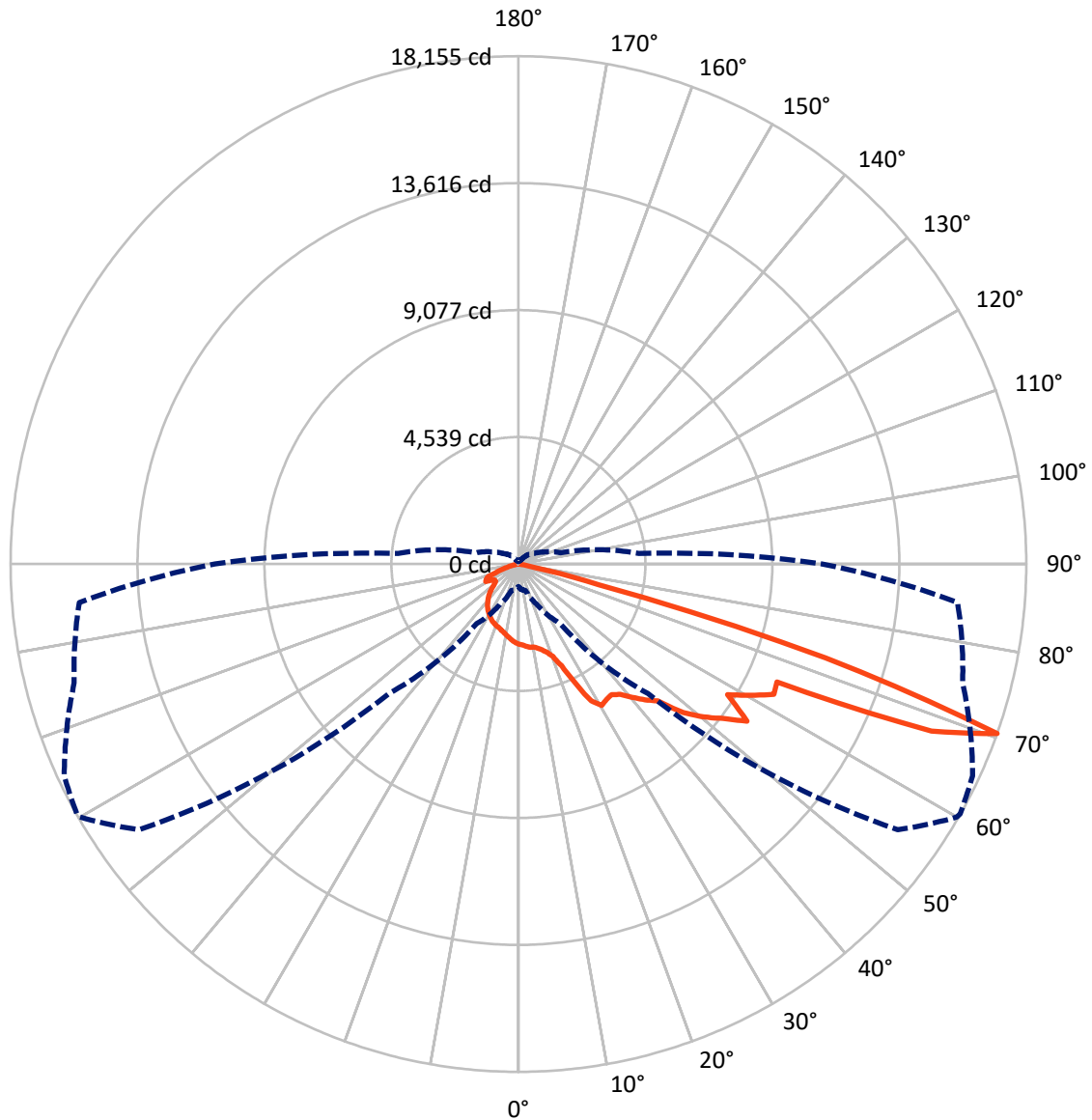
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type III - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60.2-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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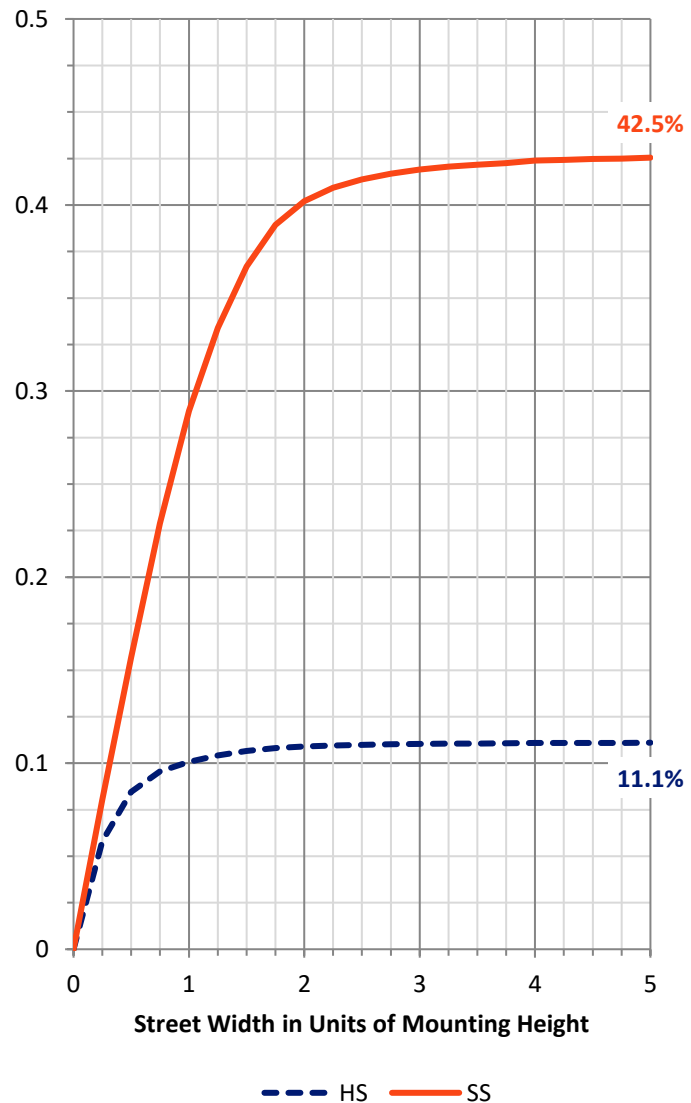
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3692.1	0.0	3692.1
	% Lamp	11.2	0.0	11.2
Street Side	Lumens	14030.6	0.0	14030.6
	% Lamp	42.5	0.0	42.5
Total	Lumens	17722.7	0.0	17722.7
	% Lamp	53.7	0.0	53.7

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	266.4	1.5	0.8
10°-20°	773.3	4.4	2.3
20°-30°	1470.3	8.3	4.5
30°-40°	2323.1	13.1	7.0
40°-50°	3023.9	17.1	9.2
50°-60°	3782.4	21.3	11.5
60°-70°	3934.5	22.2	11.9
70°-80°	2087.6	11.8	6.3
80°-90°	61.2	0.3	0.2
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	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°	17722.7	100.0	53.7
0°-180°	17722.7	100.0	53.7

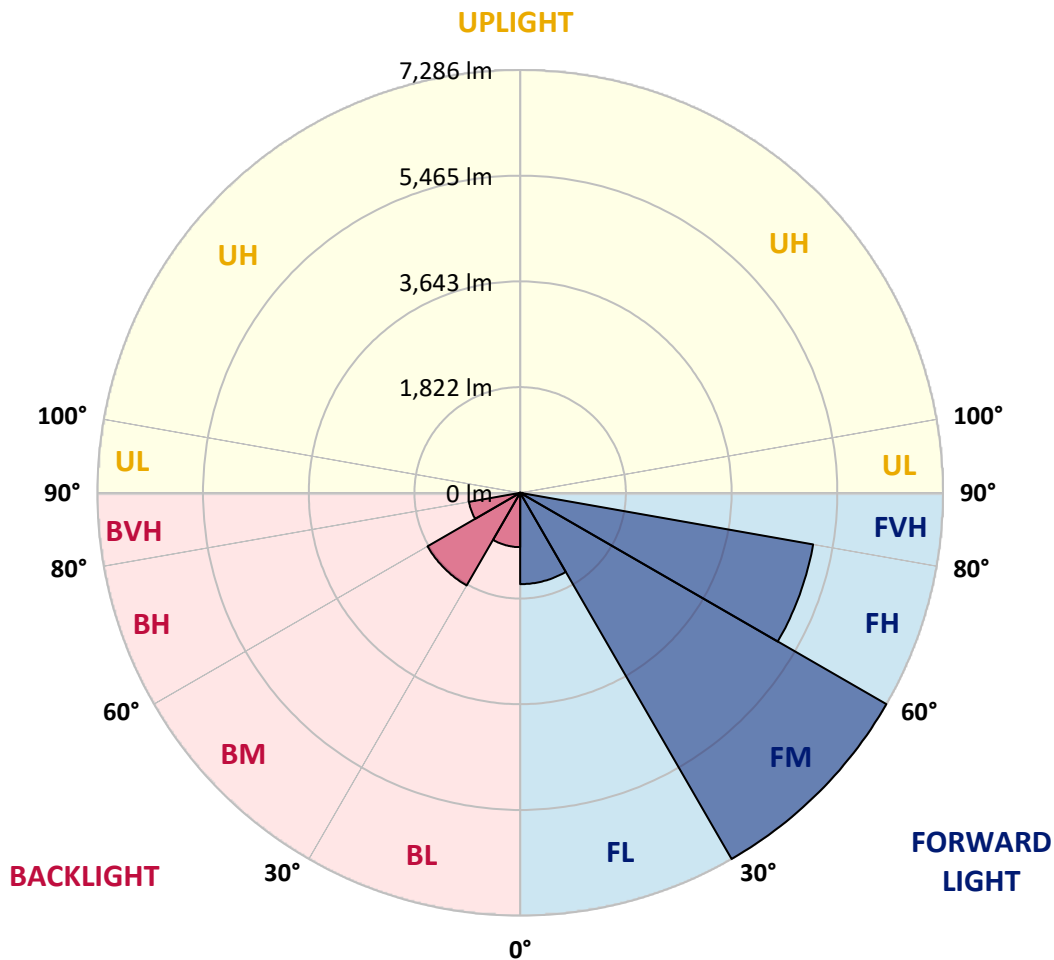


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1574.2	4.8			
FM	(30°-60°)	7286.0	22.1			
FH	(60°-80°)	5125.8	15.5			G3/7500
FVH	(80°-90°)	44.6	0.1			G1/100
BL	(0°-30°)	935.9	2.8	B2/1000		
BM	(30°-60°)	1843.3	5.6	B2/2500		
BH	(60°-80°)	896.2	2.7	B2/1000		G2/1000
BVH	(80°-90°)	16.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		15277.3	46.3			

BUG Rating: B2-U0-G3
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60.2°	65°	75°	85°
0°	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2
2.5°	2947.1	2916.8	2967.2	2916.8	2906.8	2916.8	2916.8	2896.7	2916.8	2906.8	2896.7
5°	2987.4	2987.4	2977.3	2957.2	2957.2	2957.2	2977.3	2957.2	2967.2	2957.2	2937.0
7.5°	3047.9	3027.8	2987.4	2977.3	2977.3	2997.5	3007.6	3007.6	3027.8	3017.7	2987.4
10°	3067.2	3027.8	3007.6	3017.7	3007.6	3017.7	3017.7	3017.7	3047.9	3067.2	3057.1
12.5°	3067.2	3057.1	3067.2	3057.1	3057.1	3037.8	3057.1	3087.3	3117.6	3147.8	3137.8
15°	3087.3	3087.3	3117.6	3137.8	3117.6	3117.6	3188.2	3188.2	3208.3	3237.7	3217.5
17.5°	3127.7	3117.6	3168.0	3178.1	3188.2	3267.9	3298.2	3318.3	3348.6	3428.3	3418.2
20°	3147.8	3137.8	3188.2	3227.6	3308.2	3388.0	3468.7	3528.2	3578.7	3849.1	3919.7
22.5°	3168.0	3168.0	3208.3	3298.2	3478.8	3588.8	3759.2	3949.9	4090.2	4581.5	4741.9
25°	3408.2	3348.6	3328.4	3388.0	3598.8	3829.8	4290.9	4711.7	4862.0	5383.6	5533.9
27.5°	4049.8	3919.7	3769.3	3528.2	3708.8	4210.2	4982.1	5544.0	5613.7	5743.8	5603.6
30°	5012.3	4821.7	4470.6	3949.9	4009.5	4731.8	5654.0	5864.8	5774.1	5573.3	5343.2
32.5°	6115.1	5864.8	4681.4	4360.6	4631.0	5282.8	5854.8	5774.1	5704.4	5573.3	5554.1
35°	6957.5	6726.5	4801.5	4701.6	4992.2	5684.2	5844.7	5733.8	5743.8	6015.2	6184.8
37.5°	7478.2	7268.2	4972.0	4922.5	5213.1	5984.9	5834.6	5914.3	6074.8	6495.5	6535.8
40°	7739.4	7368.2	5132.4	4841.8	5243.3	6155.4	6135.2	6265.4	6515.7	6716.4	6636.7
42.5°	7638.6	7137.2	5102.2	4340.4	5323.1	6235.2	6716.4	6636.7	6676.1	6576.2	6505.6
45°	7097.8	6576.2	4872.1	3698.8	5272.7	6556.0	7337.9	6976.8	6886.9	6886.9	6576.2
47.5°	6295.7	5704.4	4521.0	3278.0	5292.8	7217.8	7739.4	7939.2	7909.0	7778.8	7959.4
50°	5313.0	4972.0	4200.2	3157.9	5954.7	7699.1	8050.2	8591.0	8801.8	8470.9	9162.1
52.5°	4290.9	4841.8	4500.8	3448.5	6766.8	8982.4	8621.2	9172.2	9332.6	8781.7	8360.9
55°	3367.8	4510.9	3849.1	3789.5	7007.0	8069.4	9874.3	9914.7	10065.0	8180.3	8089.6
57.5°	2806.8	4490.8	4370.7	4190.1	8440.7	6917.2	8491.1	8811.9	9021.8	7989.7	8210.6
60°	2386.1	3879.3	3819.8	4431.2	7528.6	6425.8	8210.6	9523.2	9974.2	7999.8	8631.3
62.5°	1844.3	2646.4	2266.0	3358.7	4992.2	4862.0	8371.0	10254.8	10406.0	7327.8	7057.4
65°	1423.6	1573.9	1584.0	2506.2	3257.8	5954.7	9072.2	10154.8	9283.1	8219.8	8019.9
67.5°	1042.2	1112.8	1202.7	1955.2	2656.5	7468.1	13673.9	15928.9	14616.2	11618.8	13101.9
70°	802.1	902.0	982.7	1624.3	2596.0	6535.8	16560.5	18154.6	17914.4	16440.4	15758.4
72.5°	561.0	902.0	1032.2	1373.2	3718.9	5984.9	11558.2	11478.5	13373.2	11287.8	9894.5
75°	341.0	661.8	611.4	771.8	2997.5	2796.8	3558.5	2987.4	4380.8	2827.0	2706.9
77.5°	180.6	310.8	270.4	400.6	2195.4	1202.7	861.7	561.0	781.9	631.6	682.0
80°	60.5	79.8	310.8	200.8	1212.8	1022.1	240.2	110.0	170.5	170.5	260.3
82.5°	20.2	30.2	79.8	70.6	210.8	170.5	190.7	40.3	79.8	70.6	110.0
85°	20.2	0.0	0.0	10.1	20.2	20.2	20.2	10.1	30.2	30.2	50.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2	2868.2
2.5°	2887.5	2877.4	2847.2	2827.0	2796.8	2766.5	2756.4	2737.2	2727.1	2737.2	2766.5
5°	2926.9	2896.7	2847.2	2776.6	2717.0	2656.5	2606.1	2556.6	2526.3	2526.3	2566.7
7.5°	2957.2	2937.0	2827.0	2706.9	2596.0	2506.2	2416.3	2355.8	2315.5	2315.5	2386.1
10°	3027.8	2977.3	2816.9	2656.5	2496.1	2355.8	2235.8	2155.1	2114.8	2114.8	2145.0
12.5°	3107.5	3037.8	2837.1	2596.0	2396.2	2235.8	2085.4	1994.7	1955.2	1904.8	1945.2
15°	3168.0	3097.4	2837.1	2556.6	2315.5	2095.5	1945.2	1834.2	1774.7	1724.2	1764.6
17.5°	3367.8	3247.8	2887.5	2516.2	2225.7	1994.7	1814.1	1694.0	1604.2	1584.0	1624.3
20°	3829.8	3629.1	3007.6	2506.2	2165.2	1894.8	1683.9	1543.7	1453.8	1423.6	1463.9
22.5°	4601.7	4280.8	3278.0	2486.0	2085.4	1794.8	1553.8	1403.4	1303.5	1263.2	1303.5
25°	5402.8	4972.0	3558.5	2455.8	2024.9	1704.1	1443.8	1263.2	1153.2	1102.8	1143.1
27.5°	5433.1	4972.0	3548.4	2386.1	1955.2	1604.2	1323.7	1133.0	1012.9	962.5	1002.8
30°	5162.7	4671.3	3298.2	2315.5	1864.5	1503.3	1182.5	992.8	861.7	802.1	842.4
32.5°	5393.7	4811.6	3208.3	2245.8	1774.7	1383.2	1062.4	842.4	692.1	641.7	661.8
35°	5964.8	5233.2	3217.5	2175.2	1673.8	1243.0	912.1	682.0	531.7	471.2	501.4
37.5°	6285.6	5433.1	3077.2	2095.5	1553.8	1092.7	741.6	501.4	371.2	330.9	341.0
40°	6415.8	5483.5	2957.2	2004.8	1403.4	912.1	571.1	371.2	280.5	260.3	280.5
42.5°	6315.8	5373.5	2887.5	1925.0	1253.1	731.5	410.7	290.6	240.2	220.9	240.2
45°	6616.5	5804.3	2887.5	1834.2	1072.5	550.9	351.1	250.2	210.8	200.8	200.8
47.5°	8360.9	6996.9	2997.5	1704.1	881.8	420.8	310.8	240.2	200.8	170.5	180.6
50°	9503.1	7719.2	3318.3	1563.8	692.1	381.3	280.5	220.9	170.5	150.3	160.4
52.5°	8300.4	6726.5	3418.2	1433.7	611.4	400.6	280.5	200.8	170.5	150.3	160.4
55°	8501.2	6986.8	3548.4	1293.4	741.6	682.0	270.4	200.8	160.4	150.3	140.2
57.5°	8190.4	6054.6	2756.4	1202.7	832.3	982.7	270.4	180.6	130.2	110.0	120.1
60°	7248.1	4951.8	2355.8	1212.8	1082.6	902.0	280.5	200.8	140.2	120.1	120.1
62.5°	5523.8	4090.2	2496.1	1222.8	1433.7	1263.2	280.5	200.8	130.2	110.0	120.1
65°	6696.2	4531.1	2255.9	1403.4	1133.0	812.2	260.3	190.7	130.2	110.0	99.9
67.5°	11097.2	5302.9	2275.2	1153.2	1243.0	822.2	250.2	190.7	130.2	89.8	99.9
70°	10846.9	4320.2	1553.8	1012.9	641.7	461.1	210.8	160.4	110.0	89.8	99.9
72.5°	5894.2	2636.3	1022.1	721.4	410.7	330.9	170.5	120.1	89.8	70.6	79.8
75°	2105.6	1222.8	631.6	451.0	290.6	250.2	130.2	99.9	70.6	60.5	60.5
77.5°	611.4	531.7	361.2	280.5	180.6	180.6	89.8	70.6	50.4	40.3	60.5
80°	260.3	260.3	180.6	120.1	89.8	120.1	30.2	30.2	10.1	10.1	20.2
82.5°	130.2	110.0	79.8	70.6	50.4	70.6	30.2	20.2	20.2	20.2	20.2
85°	50.4	40.3	30.2	20.2	20.2	20.2	20.2	20.2	10.1	10.1	20.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)