

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: 767514_400MP

Luminaire Tested: **GMX40PXX3VHS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 767514_400MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GMX40PXX3VHS
Description: 400MH TYPE III VERTICAL AREA
WITH HOUSE SIDE SHIELD
Light Source: 400 WATT PULSE-START CLEAR ED-37 VBU BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 44000 (1 lamp)
Luminaire Lumens: 25206.9 lumens
Efficiency: 57.3%
Efficacy: 55.8 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Medium - Cutoff
BUG Rating: B4 - U3 - G4

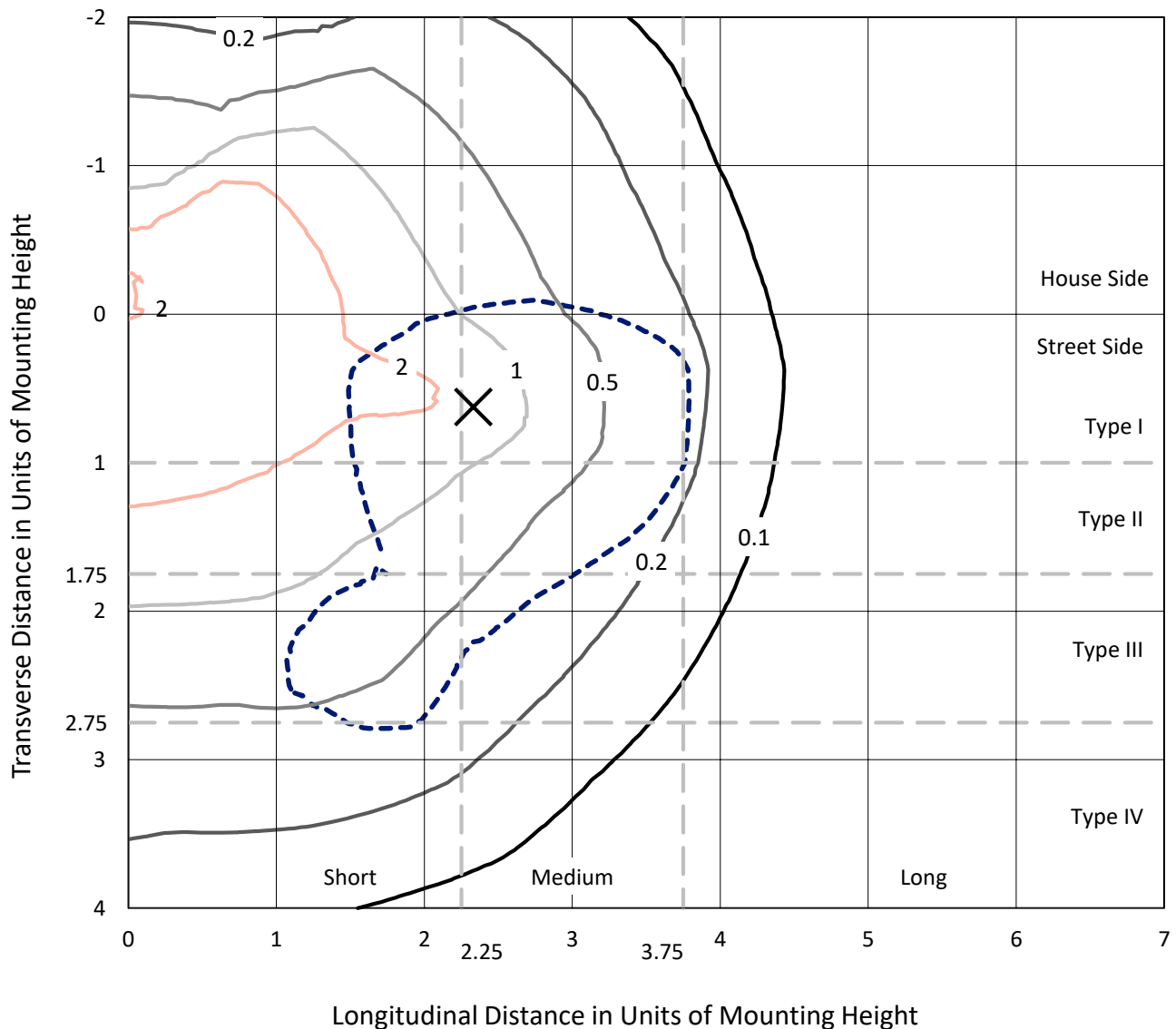
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

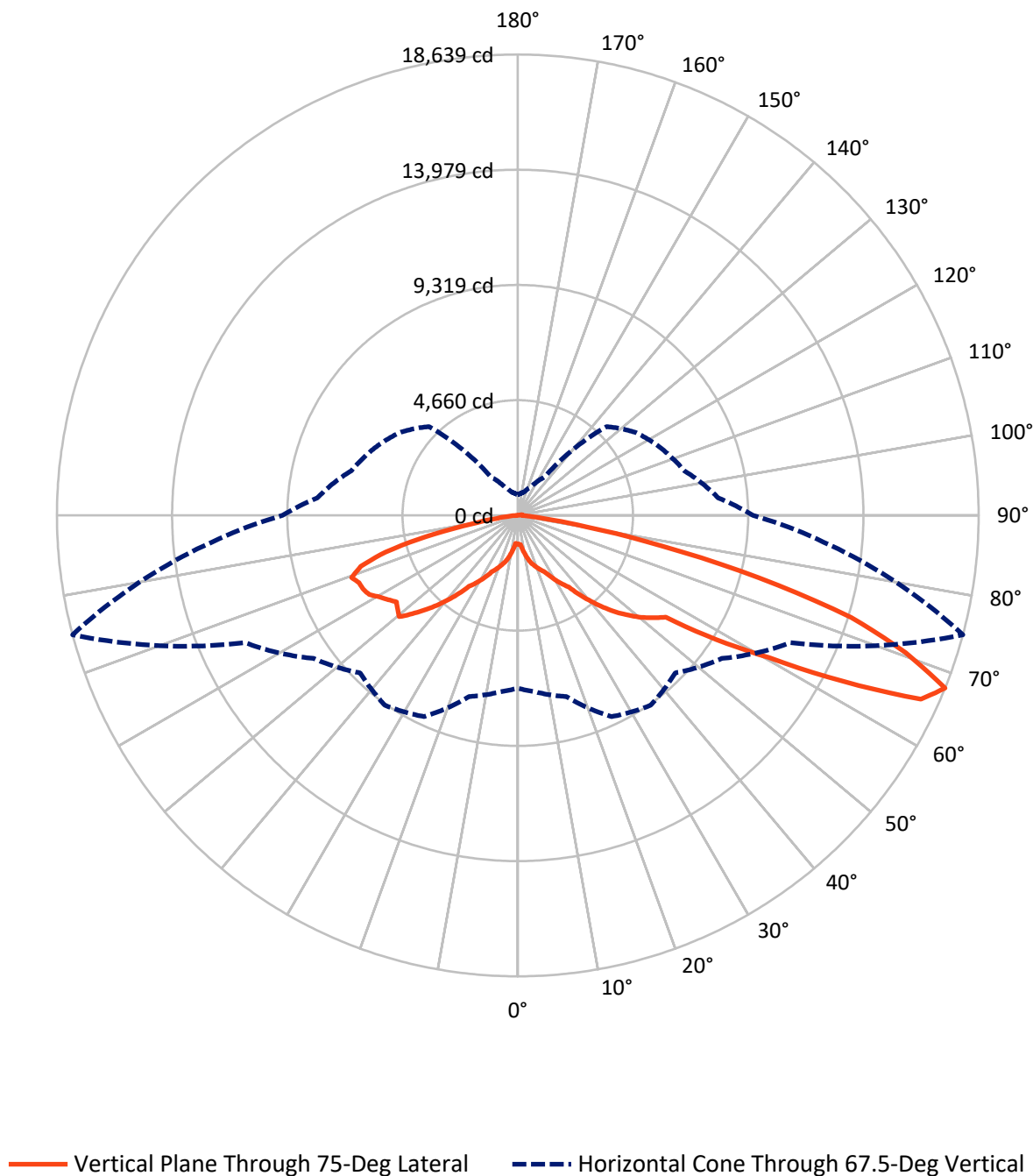
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type III - Medium - Cutoff

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Luminous Intensity Polar Plot



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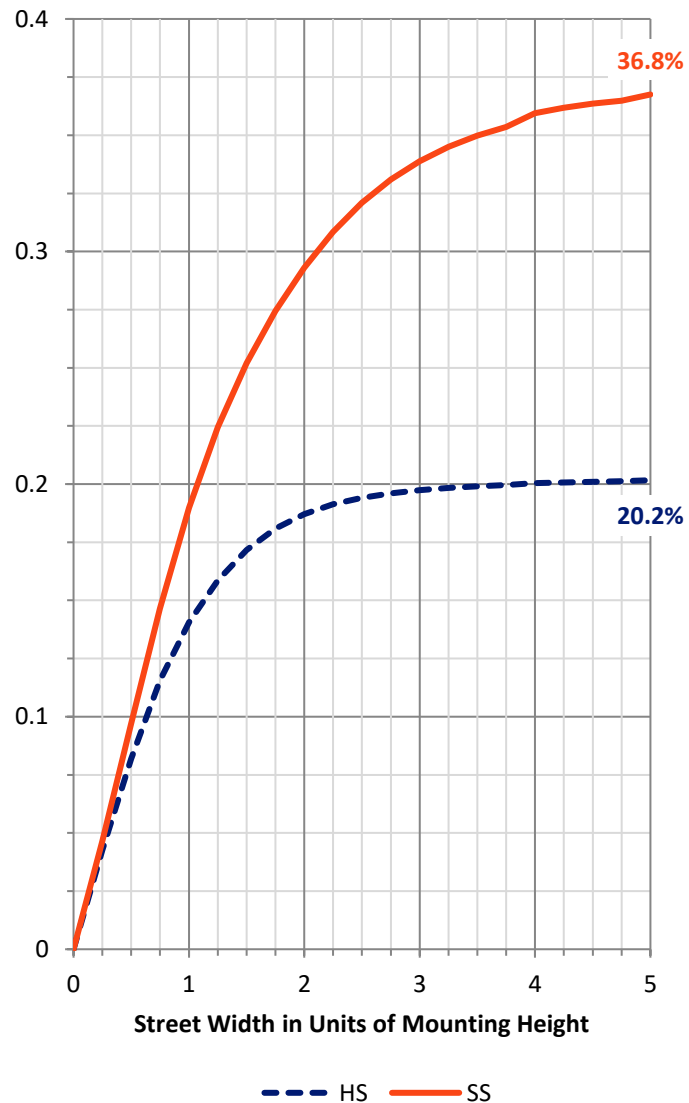
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8892.4	13.2	8905.6
	% Lamp	20.2	0.0	20.2
Street Side	Lumens	16222.4	78.8	16301.2
	% Lamp	36.9	0.2	37.0
Total	Lumens	25114.8	92.0	25206.9
	% Lamp	57.1	0.2	57.3

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	125.6	0.5	0.3
10°-20°	519.8	2.1	1.2
20°-30°	1137.3	4.5	2.6
30°-40°	2080.6	8.3	4.7
40°-50°	3481.3	13.8	7.9
50°-60°	4928.3	19.6	11.2
60°-70°	6921.7	27.5	15.7
70°-80°	5346.7	21.2	12.2
80°-90°	615.6	2.4	1.4
90°-100°	74.5	0.3	0.2
100°-110°	22.6	0.1	0.1
110°-120°	2.5	0.0	0.0
120°-130°	0.2	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°	25114.8	99.6	57.1
0°-180°	25206.9	100.0	57.3

Coefficient of Utilization



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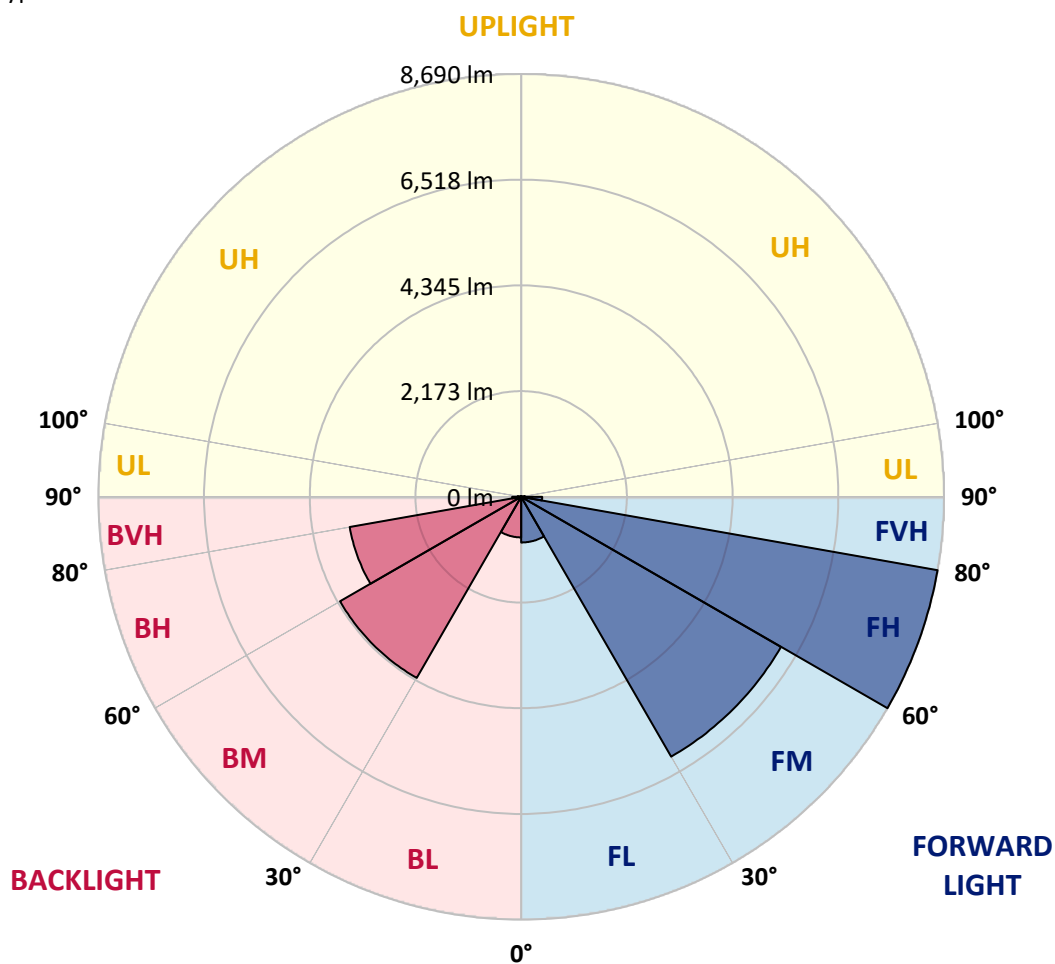
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	939.4	2.1			
FM	(30°-60°)	6166.7	14.0			
FH	(60°-80°)	8690.5	19.8			G4/12000
FVH	(80°-90°)	430.7	1.0			G3/500
BL	(0°-30°)	834.8	1.9	B2/1000		
BM	(30°-60°)	4297.9	9.8	B3/5000		
BH	(60°-80°)	3577.9	8.1	B4/5000		G4/5000
BVH	(80°-90°)	184.9	0.4			G2/225
UL	(90°-100°)	74.5	0.2		U3/500	
UH	(100°-180°)	13.2	0.0		U2/50	
Trapped Light		18793.1	42.7			

BUG Rating: B4-U3-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1
5°	1339.6	1326.1	1320.0	1294.3	1282.1	1268.7	1243.0	1211.2	1185.6	1161.1	1161.1
15°	2154.8	2142.6	2148.7	2142.6	2085.1	2072.9	2002.0	2085.1	1983.7	1906.7	1900.6
25°	2499.4	2487.2	2461.6	2423.7	2390.7	2423.7	2429.8	2505.6	2531.2	2570.3	2608.2
35°	3213.2	3201.0	3207.1	3207.1	3290.2	3405.1	3545.7	3609.2	3564.0	3718.0	3698.4
45°	4935.3	4737.3	4705.6	4897.4	5012.3	5573.3	5452.3	5821.4	5579.4	5573.3	5547.7
50°	5407.1	5331.3	5305.7	5643.0	5713.9	6318.9	6402.0	6701.4	6485.1	6758.9	6740.6
55°	5522.0	5509.8	5567.2	5732.2	6140.4	6600.0	7129.2	7205.0	7262.4	6651.3	6631.8
60°	6287.1	6255.3	6382.4	6695.3	7084.0	7581.4	8506.7	9622.6	11675.9	8239.0	7791.7
62.5°	6657.4	6600.0	6887.2	7288.1	7696.3	8104.6	9156.9	11140.6	14781.6	9692.2	8487.1
65°	6950.8	6944.7	7345.6	8034.9	8429.7	8538.4	9775.3	12122.0	17917.8	11107.6	9079.9
67.5°	6988.7	7141.4	7581.4	8978.4	9373.2	9010.2	10080.9	12173.3	18638.9	12421.4	9513.8
70°	7002.1	7129.2	7563.1	9405.0	9902.4	9527.2	10120.0	11394.8	16643.0	13033.8	9666.6
72.5°	6925.1	6758.9	7327.2	8647.2	9896.3	9226.6	9565.1	10425.6	14092.2	11892.2	9188.7
75°	5853.2	5528.1	6287.1	7115.8	8034.9	7753.8	8136.3	8927.1	10088.2	9462.4	7759.9
77.5°	3991.8	3914.8	4610.2	5018.4	5803.1	5688.2	6025.6	6032.9	5949.8	5668.7	5056.3
80°	1772.2	1823.6	2053.3	2416.3	2723.1	2919.9	2933.3	2869.8	2798.9	2429.8	2269.7
82.5°	880.0	905.7	911.8	1070.7	1205.1	1268.7	1192.9	1199.0	1103.7	1020.6	949.7
85°	459.6	477.9	446.1	491.3	554.9	548.8	459.6	523.1	465.7	465.7	497.4
87.5°	229.8	229.8	235.9	248.1	255.4	242.0	152.8	255.4	229.8	178.4	166.2
90°	178.4	172.3	178.4	178.4	184.6	178.4	89.2	204.1	184.6	127.1	121.0
95°	101.4	101.4	101.4	108.8	121.0	127.1	45.2	184.6	191.9	108.8	95.3
105°	12.2	19.6	12.2	12.2	12.2	6.1	0.0	12.2	25.7	12.2	19.6
115°	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1	1161.1
5°	1161.1	1135.4	1161.1	1147.7	1128.1	1115.9	1103.7	1103.7	1096.3	1096.3
15°	1881.0	1906.7	1950.7	1894.4	1849.2	1683.0	1351.8	1313.9	1313.9	1313.9
25°	2594.8	2493.3	2435.9	2334.4	2283.1	2212.2	2162.1	2174.3	2200.0	2206.1
35°	3571.3	3482.1	3385.6	3220.6	3169.2	3092.2	2748.8	1874.9	1613.3	1555.9
45°	5464.6	5355.8	5107.7	4814.3	4558.9	4106.7	2091.2	1339.6	1243.0	1236.9
50°	6580.4	6306.7	5700.4	5458.4	5062.4	3960.0	1868.8	1498.4	1466.7	1466.7
55°	6568.2	6025.6	5636.9	5375.3	5113.8	3589.7	1912.8	1837.0	1804.0	1811.3
60°	7416.4	6485.1	6013.3	5624.7	5266.6	3117.9	1760.0	1645.1	1619.4	1619.4
62.5°	7773.3	6810.2	6243.1	5751.8	5331.3	2665.7	1562.0	1415.3	1389.7	1389.7
65°	8009.2	6925.1	6376.3	5803.1	5260.4	2237.9	1326.1	1141.6	1096.3	1109.8
67.5°	8136.3	6969.1	6408.1	5834.9	5075.9	1894.4	1274.8	975.3	873.9	842.1
70°	8264.7	7173.2	6516.9	5853.2	4635.9	1460.6	1007.1	765.1	682.0	612.3
72.5°	7735.4	6675.8	6045.1	5101.6	3698.4	1173.3	721.1	535.3	356.9	305.6
75°	6663.6	5541.6	5152.9	4126.2	2792.8	1058.4	561.0	312.9	242.0	229.8
77.5°	4566.2	3813.3	3577.4	2735.3	1855.3	834.8	427.8	235.9	146.7	127.1
80°	2212.2	1861.4	1785.7	1230.8	911.8	446.1	223.7	127.1	63.6	63.6
82.5°	943.6	842.1	892.2	727.2	561.0	312.9	166.2	83.1	45.2	37.9
85°	471.8	394.8	497.4	465.7	446.1	178.4	89.2	37.9	12.2	12.2
87.5°	146.7	69.7	101.4	77.0	57.4	25.7	6.1	0.0	0.0	0.0
90°	95.3	31.8	63.6	45.2	25.7	12.2	6.1	0.0	0.0	0.0
95°	69.7	19.6	25.7	12.2	0.0	0.0	0.0	0.0	0.0	0.0
105°	12.2	0.0	6.1	6.1	0.0	6.1	6.1	0.0	0.0	0.0
115°	6.1	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)