

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: 766034_400MP

Luminaire Tested: **GMX40PXXRW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 766034_400MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GMX40PXXRW
Description: 400MH RECTANGULAR WIDE AREA
Light Source: 400 WATT PULSE-START CLEAR ED-37 VBU BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 44000 (1 lamp)
Luminaire Lumens: 29750.8 lumens
Efficiency: 67.6%
Efficacy: 65.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.81' x L: 1.81' x H: 0.83')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U3 - G5

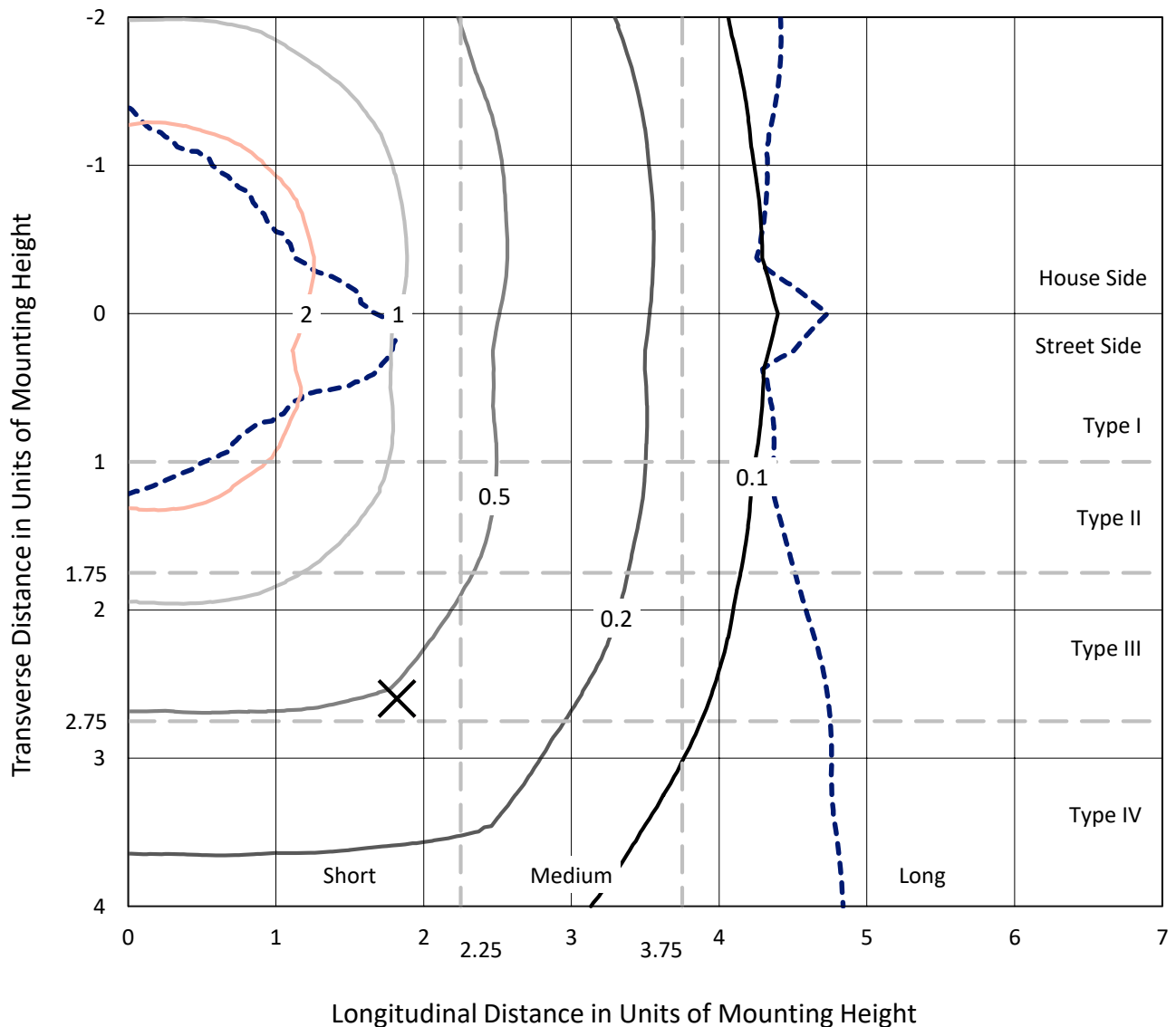
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

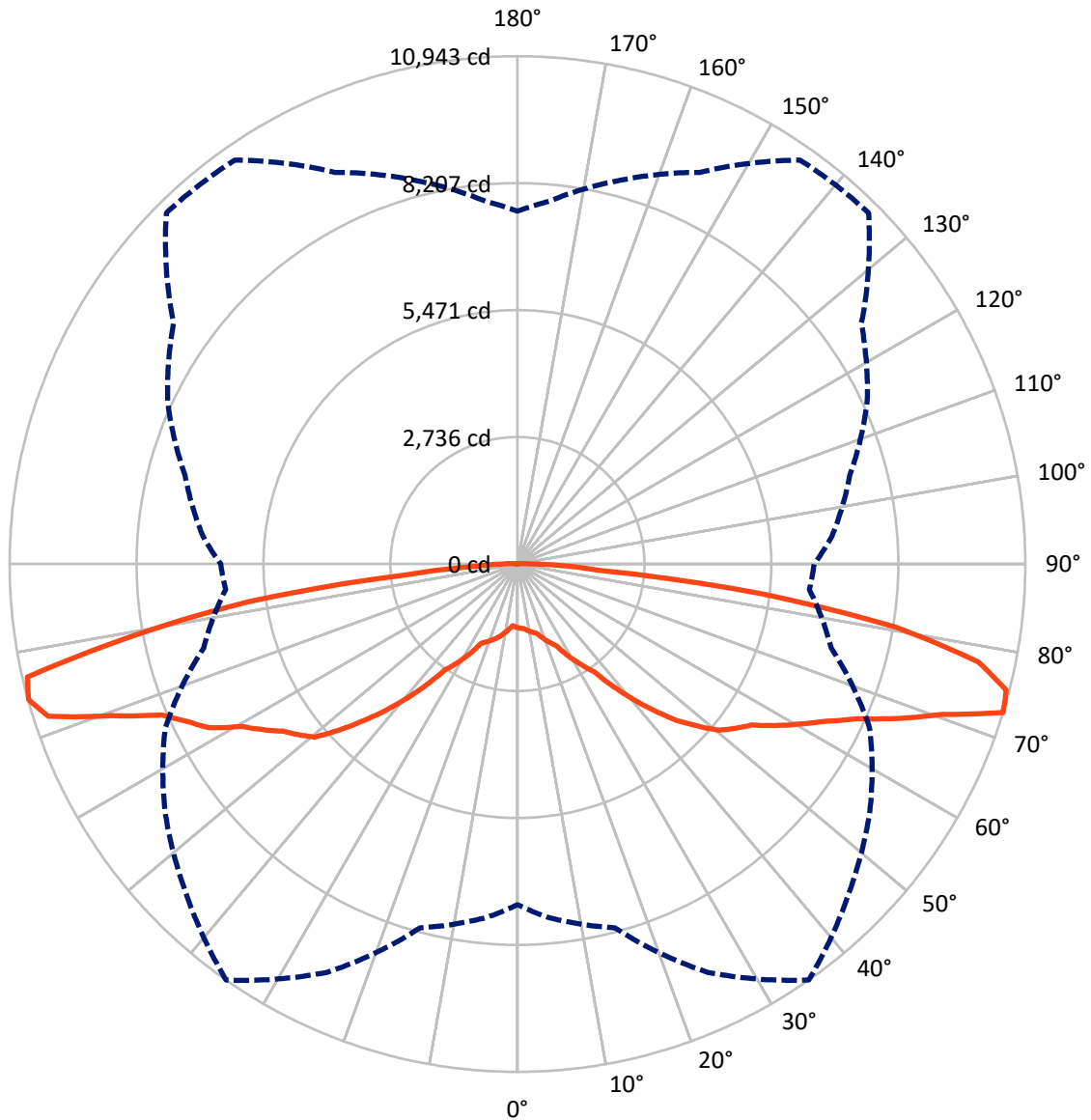
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



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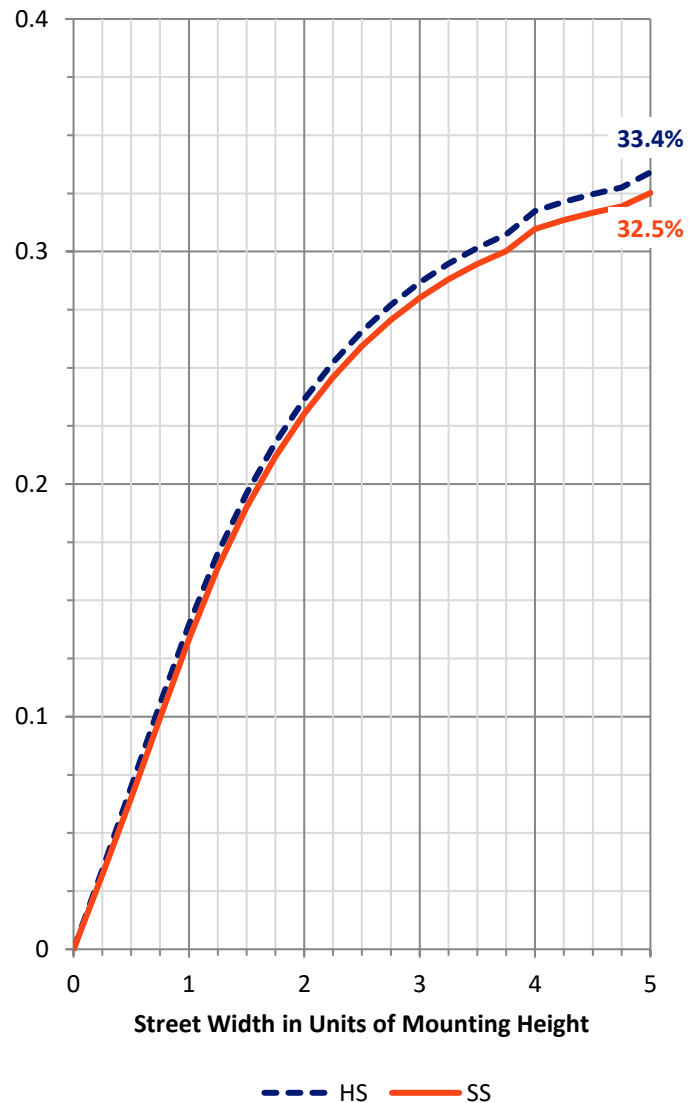
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14981.1	83.7	15064.8
	% Lamp	34.0	0.2	34.2
Street Side	Lumens	14622.5	63.4	14685.9
	% Lamp	33.2	0.1	33.4
Total	Lumens	29603.6	147.1	29750.8
	% Lamp	67.3	0.3	67.6

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	133.1	0.4	0.3
10°-20°	446.5	1.5	1.0
20°-30°	917.2	3.1	2.1
30°-40°	1842.4	6.2	4.2
40°-50°	3499.4	11.8	8.0
50°-60°	5291.9	17.8	12.0
60°-70°	7259.1	24.4	16.5
70°-80°	8087.5	27.2	18.4
80°-90°	2235.5	7.5	5.1
90°-100°	118.0	0.4	0.3
100°-110°	30.9	0.1	0.1
110°-120°	5.8	0.0	0.0
120°-130°	0.7	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°	29603.6	99.5	67.3
0°-180°	29750.8	100.0	67.6

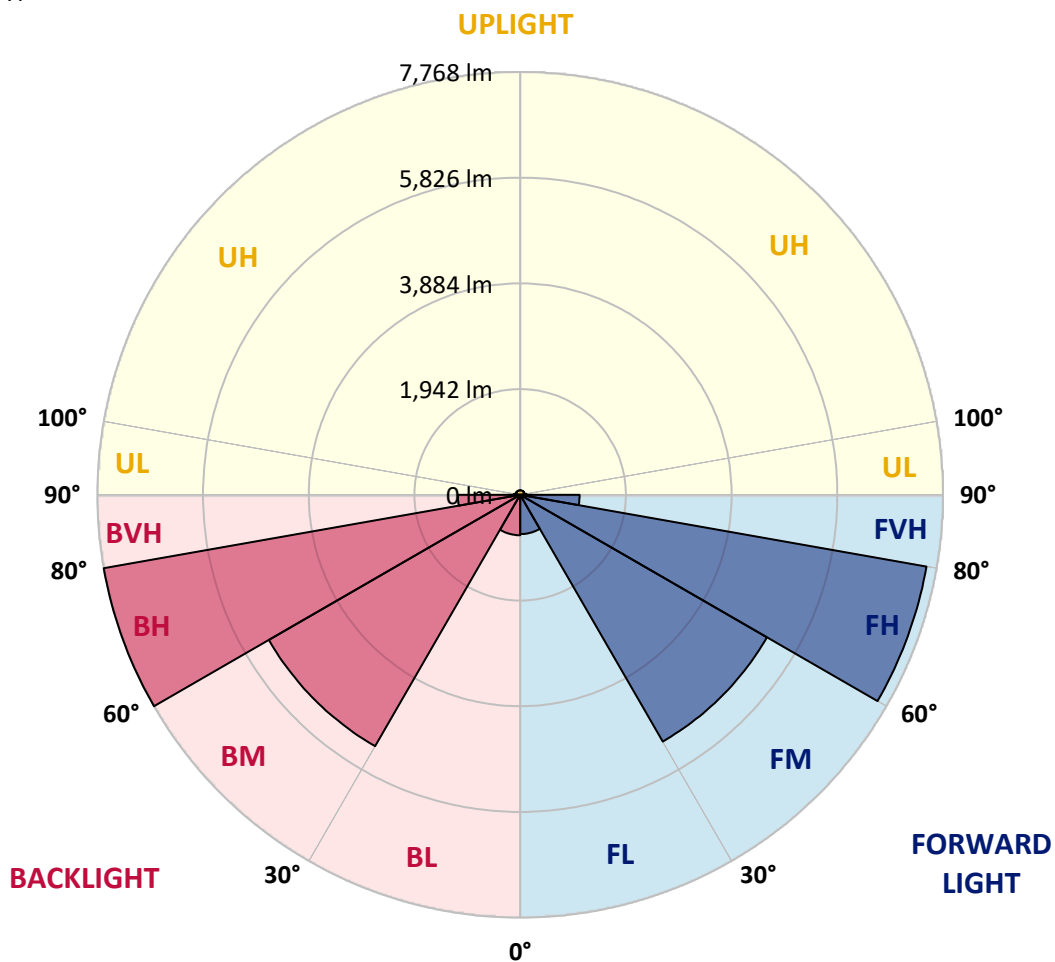


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	722.2	1.6			
FM (30°-60°)	5234.5	11.9			
FH (60°-80°)	7579.0	17.2			G4/12000
FVH (80°-90°)	1091.1	2.5			G5
BL (0°-30°)	742.4	1.7	B2/1000		
BM (30°-60°)	5331.2	12.1	B4/8500		
BH (60°-80°)	7767.5	17.7	B5		G4/12000
BVH (80°-90°)	1144.5	2.6			G5
UL (90°-100°)	118.0	0.3		U3/500	
UH (100°-180°)	83.7	0.2		U3/500	
Trapped Light	14249.2	32.4			

BUG Rating: B5-U3-G5
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0
5°	1430.0	1433.7	1412.9	1417.8	1399.4	1382.3	1388.4	1364.0	1357.9	1327.3	1342.0
15°	1491.1	1494.8	1486.2	1527.8	1549.8	1518.0	1454.4	1430.0	1382.3	1409.2	1443.4
25°	1923.8	1939.7	1944.6	1960.4	1951.9	1896.9	1838.2	1753.9	1628.0	1637.8	1674.4
35°	2839.2	2808.7	2828.2	2851.4	2852.7	2812.3	2696.2	2569.1	2322.2	2358.9	2483.6
45°	4386.6	4695.8	4709.2	4769.1	4799.7	4675.0	4419.6	4340.1	3850.0	4032.1	4044.3
50°	5502.4	5524.4	5640.6	5820.2	5630.8	5926.6	5360.7	5217.7	4462.3	4668.9	4821.7
55°	5677.2	5886.2	6157.6	6296.9	6124.6	6178.3	5867.9	5808.0	4854.7	4948.8	5247.0
60°	6155.1	6260.2	6564.6	6756.4	7000.9	6927.6	6787.0	6251.7	5500.0	5211.6	5475.6
62.5°	6584.1	6584.1	6978.9	7372.4	7462.9	7476.3	7411.6	6681.9	5819.0	5594.1	5801.9
65°	6453.3	6860.3	7315.0	7849.1	8036.1	7987.2	7785.6	7103.6	6067.1	5779.9	5986.4
67.5°	7042.4	7129.2	7572.9	8239.0	8873.3	8525.0	8270.8	7476.3	6270.0	5886.2	6117.2
70°	7393.2	7409.1	8054.4	9012.7	9706.9	9276.7	8890.4	7780.7	6635.4	6117.2	6304.2
72.5°	7340.7	7643.8	8115.6	9706.9	10942.6	10080.9	9271.8	8375.9	6998.4	6312.8	6394.7
75°	6641.6	6711.2	7445.8	8891.7	10879.0	9478.3	8786.6	7450.7	6589.0	5877.7	6051.2
77.5°	5199.3	5232.3	6422.8	7934.7	10160.3	8724.2	7627.9	6285.9	5436.4	5311.8	5683.3
80°	3169.2	3524.9	4087.1	5448.7	8276.9	6713.7	5600.2	4827.8	3683.8	3960.0	4632.2
82.5°	1780.8	2185.3	2322.2	3251.1	5350.9	4782.6	3994.2	3055.6	2769.6	2604.6	2732.9
85°	804.2	729.7	1014.4	1503.3	1835.8	1719.7	1954.3	1257.7	1096.3	1162.3	1382.3
87.5°	294.6	334.9	484.0	702.8	909.3	837.2	778.6	760.2	449.8	410.7	383.8
90°	77.0	112.4	133.2	195.6	257.9	276.2	257.9	228.6	191.9	127.1	127.1
95°	28.1	39.1	51.3	70.9	84.3	75.8	81.9	85.6	73.3	48.9	46.4
105°	8.6	12.2	14.7	18.3	8.6	9.8	15.9	26.9	20.8	8.6	3.7
115°	0.0	0.0	2.4	2.4	2.4	2.4	2.4	2.4	3.7	3.7	3.7
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
165°	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°	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0	1375.0
5°	1350.6	1323.7	1324.9	1317.6	1311.4	1333.4	1311.4	1315.1	1342.0	1294.3
15°	1488.7	1610.9	1635.3	1679.3	1707.4	1628.0	1670.8	1631.7	1613.3	1637.8
25°	1744.1	1877.3	1860.2	1895.7	1905.4	1872.4	1823.6	1835.8	1801.6	1846.8
35°	2560.6	2560.6	2808.7	2784.2	2861.2	2775.7	2712.1	2660.8	2554.4	2630.2
45°	4272.9	4483.1	4621.2	4660.3	4621.2	4730.0	4565.0	4607.8	4453.8	4423.2
50°	4925.6	5409.6	5558.7	5871.6	5746.9	5744.4	5539.1	5540.3	5314.2	5179.8
55°	5165.1	5749.3	5898.4	6197.9	6108.7	6204.0	5971.8	5744.4	5640.6	5465.8
60°	5728.6	6191.8	6538.9	7125.6	6967.9	6894.6	6882.3	6751.6	6292.0	6404.4
62.5°	6123.3	6523.0	6988.7	7488.6	7581.4	7517.9	7508.1	7268.6	6796.8	6744.2
65°	6251.7	6757.7	7283.2	7885.8	8036.1	7879.7	7946.9	7445.8	7055.9	7000.9
67.5°	6394.7	6911.7	7558.2	8240.2	8561.7	8322.1	8416.2	7923.7	7286.9	7311.3
70°	6645.2	7097.4	7910.2	8562.9	9621.3	9332.9	8841.6	8327.0	7521.6	7458.0
72.5°	6799.2	7415.2	8316.0	9046.9	10699.3	10623.6	9308.4	8559.2	7844.2	7601.0
75°	6161.2	6699.0	7546.0	8394.2	10616.2	10932.8	8571.4	7824.7	7052.2	6735.7
77.5°	5173.7	5390.0	6102.6	7462.9	9962.3	10836.2	7654.8	6653.8	6464.3	6270.0
80°	3927.0	3962.4	4248.4	5185.9	7719.6	8346.6	5530.6	4477.0	4554.0	4489.2
82.5°	2393.1	2413.9	2575.2	3204.7	4901.1	5841.0	3296.3	3089.8	2495.8	2450.6
85°	1123.2	1157.4	1467.9	1719.7	2252.6	2398.0	1929.9	1239.3	1153.8	1037.7
87.5°	404.6	514.6	717.4	864.1	818.9	851.9	763.9	490.1	408.2	380.1
90°	128.3	176.0	257.9	332.4	337.3	344.7	286.0	240.8	139.3	127.1
95°	52.6	96.6	102.7	116.1	100.2	108.8	112.4	85.6	69.7	52.6
105°	8.6	22.0	28.1	18.3	14.7	15.9	26.9	20.8	12.2	8.6
115°	3.7	3.7	3.7	3.7	6.1	6.1	6.1	2.4	2.4	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
165°	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)