

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: 765565\_400MP

Luminaire Tested:

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: 765565\_400MP  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number:  
Description: 400W MH TYPE V AREA  
Light Source: 400 WATT PULSE-START CLEAR ED-37 HORIZONTAL BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 40000 (1 lamp)  
Luminaire Lumens: 32191.3 lumens  
Efficiency: 80.5%  
Efficacy: 71.2 lumens/watt  
Luminous Opening: (L: -2.1 ' x W: 0 ' x H: 1.3 '  
IES Classification: Type III - Short - Cutoff  
BUG Rating: B5 - U2 - G4

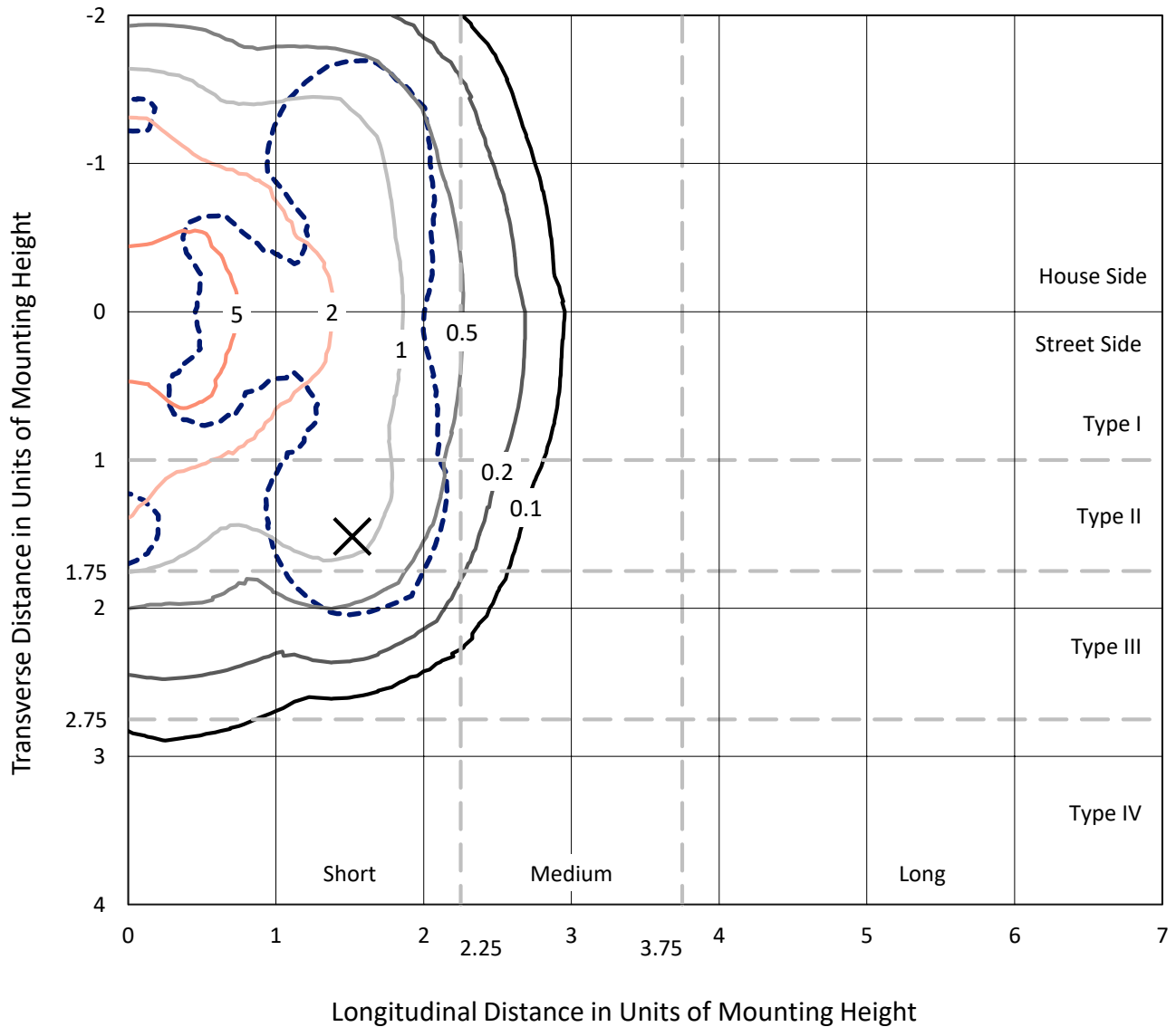
Input Watts (W): 452  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

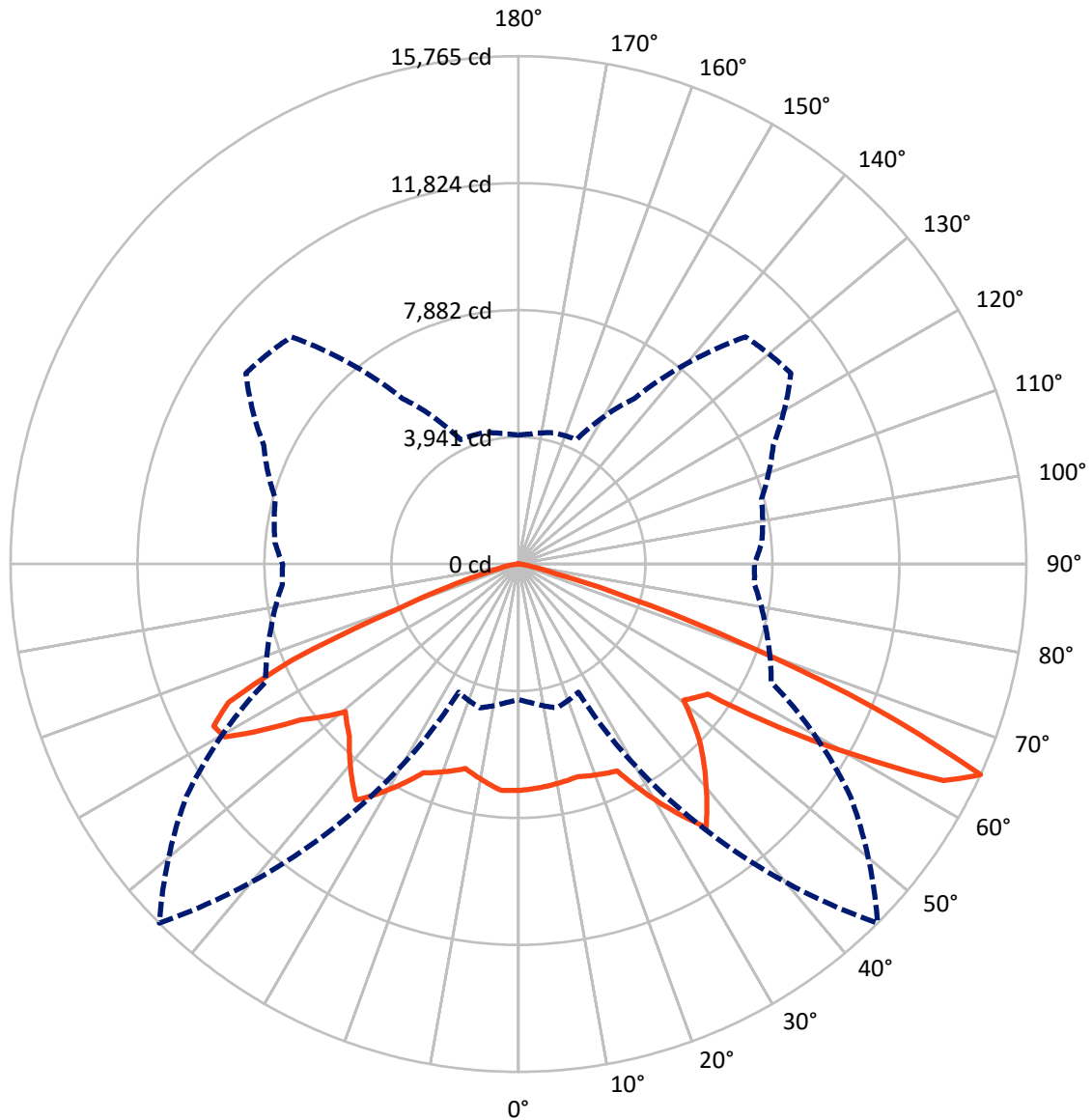
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.8 fc  
 Type III - Short - Cutoff

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### Luminous Intensity Polar Plot



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

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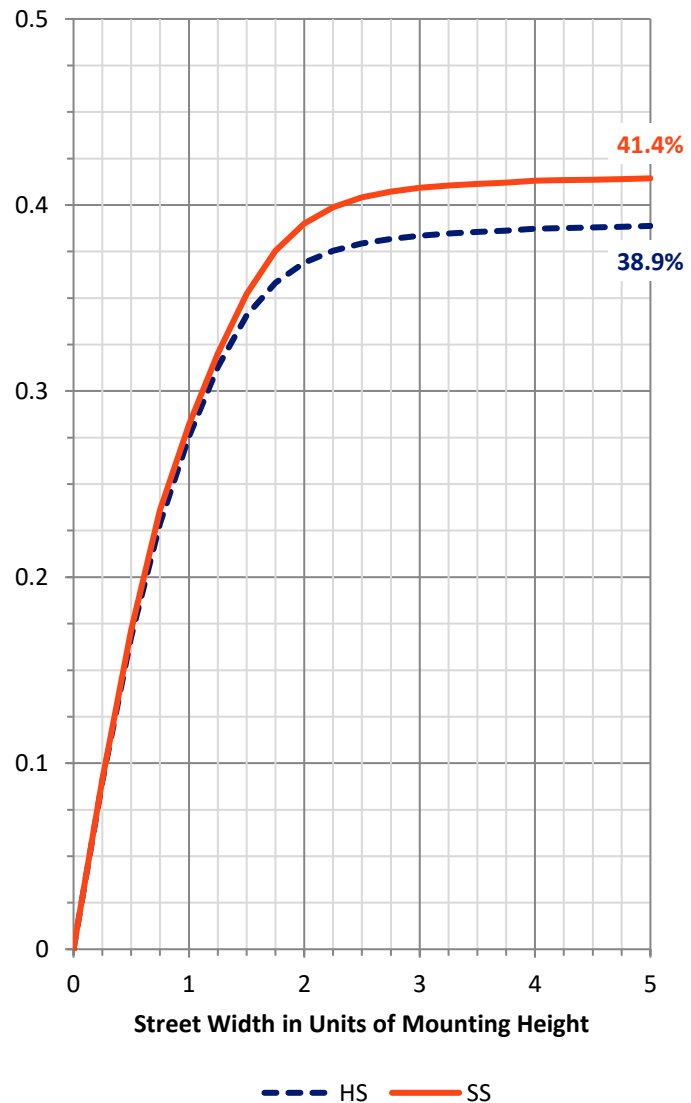
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15595.9	19.8	15615.7
	% Lamp	39.0	0.0	39.0
<b>Street Side</b>	Lumens	16557.4	18.2	16575.6
	% Lamp	41.4	0.0	41.4
<b>Total</b>	Lumens	32153.2	38.1	32191.3
	% Lamp	80.4	0.1	80.5

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	660.3	2.1	1.7
10°-20°	1936.5	6.0	4.8
20°-30°	3325.4	10.3	8.3
30°-40°	4816.3	15.0	12.0
40°-50°	5784.9	18.0	14.5
50°-60°	6960.9	21.6	17.4
60°-70°	6994.4	21.7	17.5
70°-80°	1492.6	4.6	3.7
80°-90°	97.1	0.3	0.2
90°-100°	13.4	0.0	0.0
100°-110°	14.3	0.0	0.0
110°-120°	8.2	0.0	0.0
120°-130°	2.0	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°	32153.2	99.9	80.4
0°-180°	32191.3	100.0	80.5



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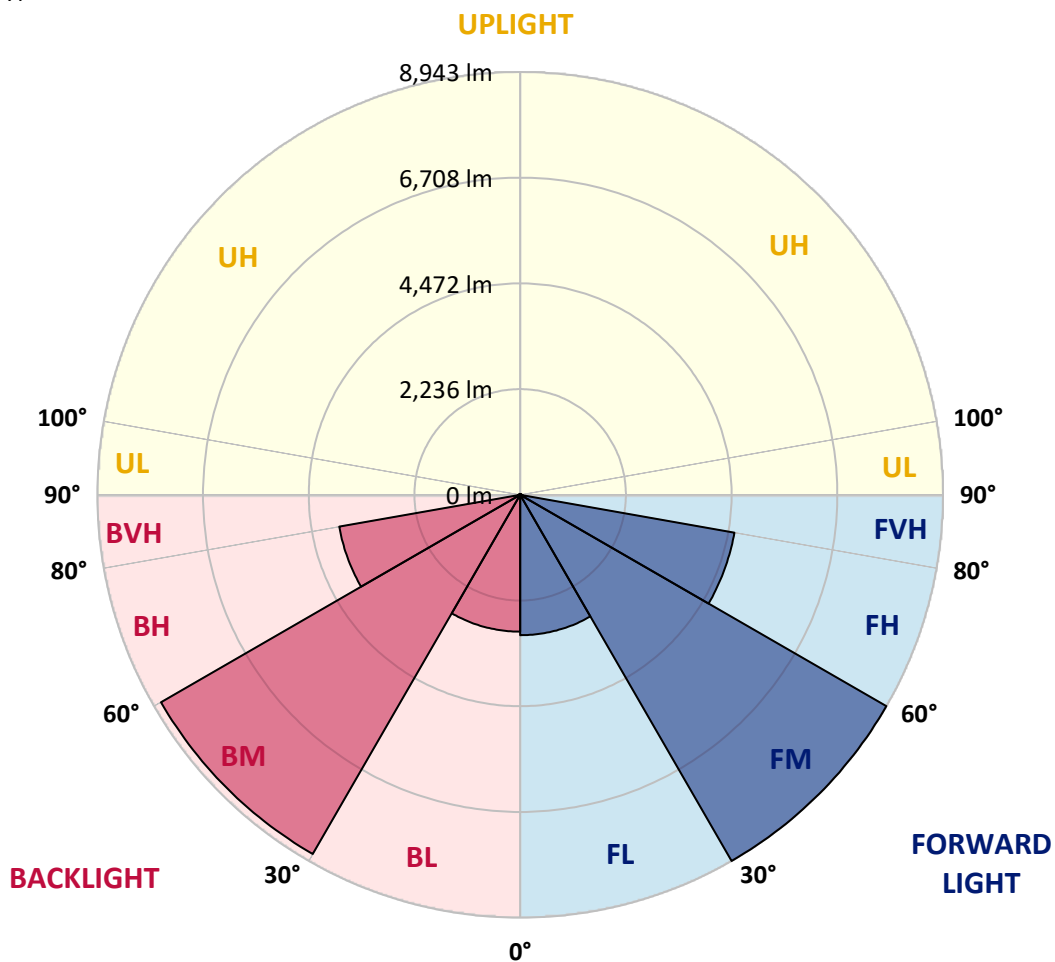
CATALOG NUMBER:

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2969.8	7.4			
FM (30°-60°)	8943.4	22.4			
FH (60°-80°)	4602.0	11.5			G2/5000
FVH (80°-90°)	48.8	0.1			G1/100
BL (0°-30°)	2894.3	7.2	B4/5000		
BM (30°-60°)	8772.8	21.9	B5		
BH (60°-80°)	3885.0	9.7	B4/5000		G4/5000
BVH (80°-90°)	48.4	0.1			G1/100
UL (90°-100°)	13.4	0.0		U2/50	
UH (100°-180°)	19.8	0.0		U2/50	
Trapped Light	7808.7	19.5			

**BUG Rating: B5-U2-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9
5°	7147.4	7125.5	7103.7	7054.0	7017.6	6973.9	6973.9	6958.2	6986.1	6978.8	6948.5
15°	6407.5	6397.8	6443.9	6573.7	6688.9	6852.6	6954.5	7051.5	7090.4	7147.4	7153.4
25°	6100.7	6128.6	6315.3	6688.9	6973.9	7115.8	7161.9	7400.8	7748.9	7895.7	7909.0
35°	5534.3	5598.5	6371.1	8212.2	10077.6	10032.7	9024.9	8565.2	8515.5	8445.1	8491.2
45°	6055.8	5952.7	5930.9	6525.2	7301.4	7904.2	7753.8	8305.6	9143.7	9455.4	9455.4
50°	7495.5	7318.4	6282.6	6149.2	6412.4	6642.8	6553.1	7244.4	8346.9	8564.0	8583.4
55°	9434.8	8533.7	6929.0	6116.4	6735.0	7130.4	7054.0	7878.7	8975.1	8982.4	9000.6
60°	7755.0	7522.1	6477.9	5529.4	8223.2	12069.1	11221.3	9146.1	9252.9	9107.3	9188.6
62.5°	5587.6	4899.9	5736.8	4785.9	9667.7	14813.8	12857.5	9340.2	8600.4	8124.9	8163.7
65°	4208.6	4315.3	4619.8	4391.8	10007.3	15764.7	12583.4	8656.2	7961.2	7354.8	7319.6
67.5°	3410.6	3614.3	3785.3	3835.1	8551.8	11917.5	10280.2	7289.3	6590.7	6277.7	6246.2
70°	2550.6	3024.9	2920.6	2885.4	5799.9	7314.7	5634.9	4192.8	4206.2	3877.5	3768.3
72.5°	1920.0	1966.0	1992.7	1501.5	2486.4	3560.9	2800.5	1763.5	1776.8	1474.8	1721.0
75°	1189.8	1325.7	1282.0	840.5	1049.1	1178.9	1197.1	988.5	895.1	893.9	915.7
77.5°	895.1	903.6	873.3	513.0	500.9	597.9	549.4	494.8	604.0	463.3	481.5
80°	471.8	490.0	504.5	274.1	264.4	280.2	253.5	229.2	209.8	219.5	222.0
82.5°	234.1	223.2	197.7	149.2	149.2	129.8	110.4	99.5	103.1	109.2	104.3
85°	60.6	71.6	64.3	57.0	57.0	57.0	46.1	36.4	37.6	27.9	21.8
87.5°	21.8	26.7	26.7	15.8	20.6	15.8	3.6	0.0	0.0	0.0	0.0
90°	19.4	27.9	21.8	12.1	14.6	3.6	0.0	0.0	0.0	0.0	0.0
95°	41.2	46.1	46.1	27.9	26.7	19.4	0.0	0.0	0.0	0.0	0.0
105°	15.8	20.6	25.5	30.3	31.5	12.1	0.0	0.0	0.0	0.0	0.0
115°	3.6	6.1	1.2	0.0	4.9	4.9	3.6	8.5	15.8	4.9	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
165°	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°	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9	7024.9
5°	6942.4	6907.2	6887.8	7022.4	7043.1	6909.6	6859.9	6772.6	6732.6	6844.1
15°	7120.7	7147.4	6898.7	6727.7	6554.3	6350.5	6190.4	6129.8	6066.7	6043.7
25°	7849.6	7681.0	7330.5	7216.5	7124.3	6809.0	6407.5	6057.0	5883.6	5856.9
35°	8617.3	8754.4	8640.4	8769.0	8893.9	8188.0	6933.9	6070.3	5633.7	5609.5
45°	9277.1	8690.1	7855.7	7645.8	7489.4	6823.5	6332.3	6511.8	6668.3	6561.6
50°	8488.8	7895.7	6948.5	6970.3	7062.5	6491.2	6205.0	6862.3	7968.5	7859.3
55°	9117.0	8941.2	8138.3	8429.4	8328.7	6735.0	5981.8	6846.6	8208.6	8213.5
60°	8927.8	8866.0	9456.6	10823.5	10581.0	7047.9	5135.2	5818.1	5619.2	5622.8
62.5°	8259.6	8531.2	9546.4	11414.2	10711.9	6887.8	4722.9	5024.9	4730.1	4527.6
65°	7584.0	7812.0	8725.3	10323.8	9970.9	6270.5	4258.3	4215.9	4048.5	4002.4
67.5°	6185.6	6379.6	6631.9	8146.8	7603.4	5095.2	3477.3	3280.8	3396.0	3322.0
70°	3103.7	3257.7	3423.9	4469.4	4042.4	2863.6	1909.0	2349.3	2813.8	2737.4
72.5°	1704.1	1809.6	1960.0	2194.1	2264.4	1500.3	1300.2	1730.7	1836.3	1803.5
75°	812.6	846.6	1035.8	1129.2	1144.9	949.7	840.5	1168.0	1363.3	1341.4
77.5°	476.7	490.0	521.5	545.8	562.8	594.3	509.4	762.9	956.9	1030.9
80°	266.8	235.3	248.6	305.6	435.4	311.7	303.2	378.4	508.2	499.7
82.5°	89.8	97.0	105.5	137.1	144.3	137.1	117.6	145.5	228.0	218.3
85°	26.7	32.7	40.0	42.4	47.3	64.3	52.2	57.0	66.7	76.4
87.5°	0.0	0.0	1.2	4.9	9.7	17.0	19.4	10.9	10.9	9.7
90°	0.0	0.0	0.0	0.0	0.0	4.9	4.9	1.2	0.0	15.8
95°	0.0	0.0	0.0	0.0	0.0	4.9	24.3	46.1	21.8	15.8
105°	0.0	0.0	0.0	0.0	0.0	4.9	14.6	48.5	84.9	98.2
115°	0.0	14.6	9.7	3.6	10.9	8.5	10.9	17.0	36.4	37.6
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
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)