

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: 766032_400MP

Luminaire Tested: **GMX40PXXAS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 766032_400MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GMX40PXXAS
Description: 400MH TYPE VERTICAL AREA SQUARE
Light Source: 400 WATT PULSE-START CLEAR ED-37 VBU BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 44000 (1 lamp)
Luminaire Lumens: 29709 lumens
Efficiency: 67.5%
Efficacy: 65.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.81' x L: 1.81' x H: 0.83')
IES Classification: Type V - Medium - Non-Cutoff
BUG Rating: B5 - U3 - G5

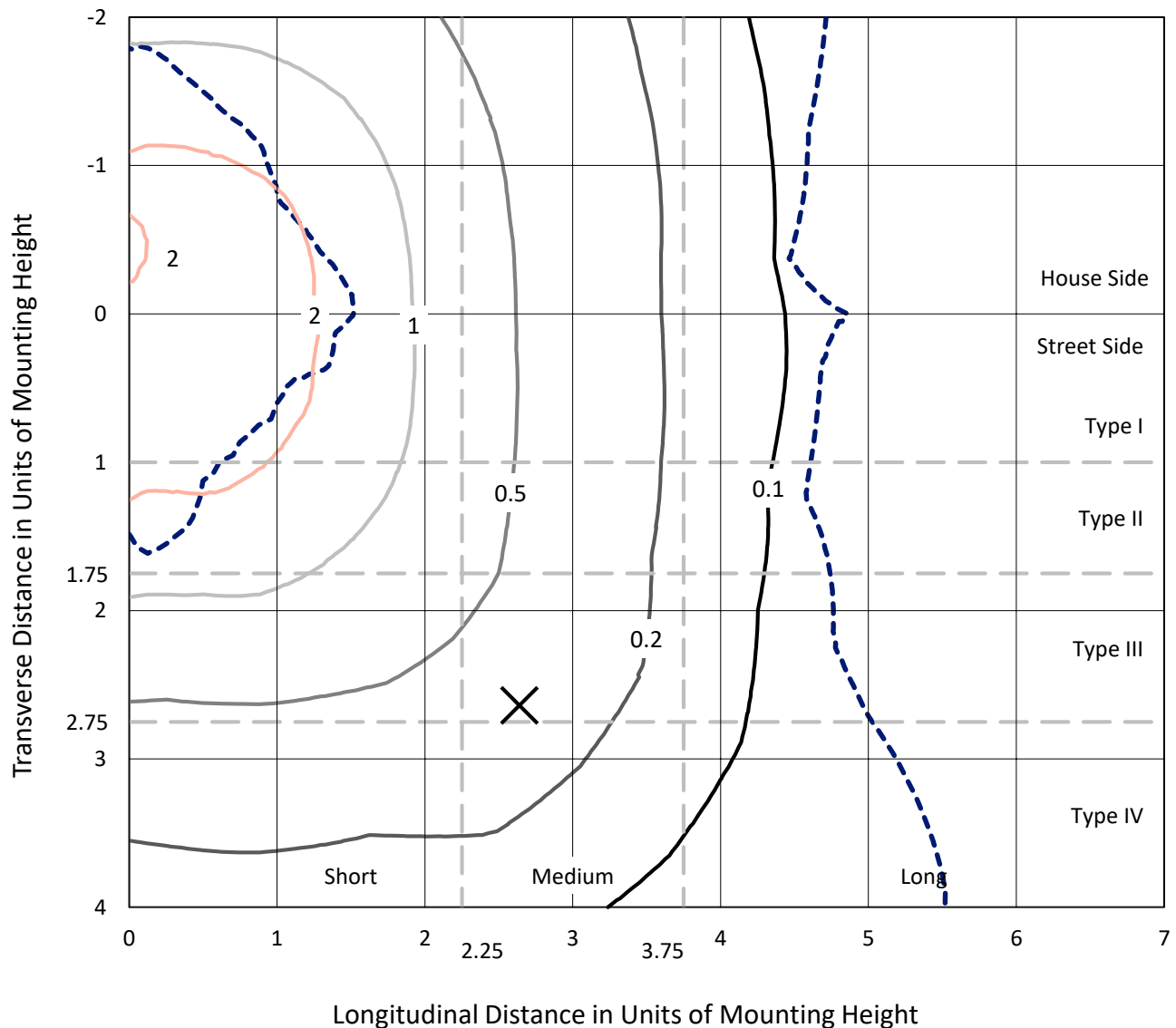
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

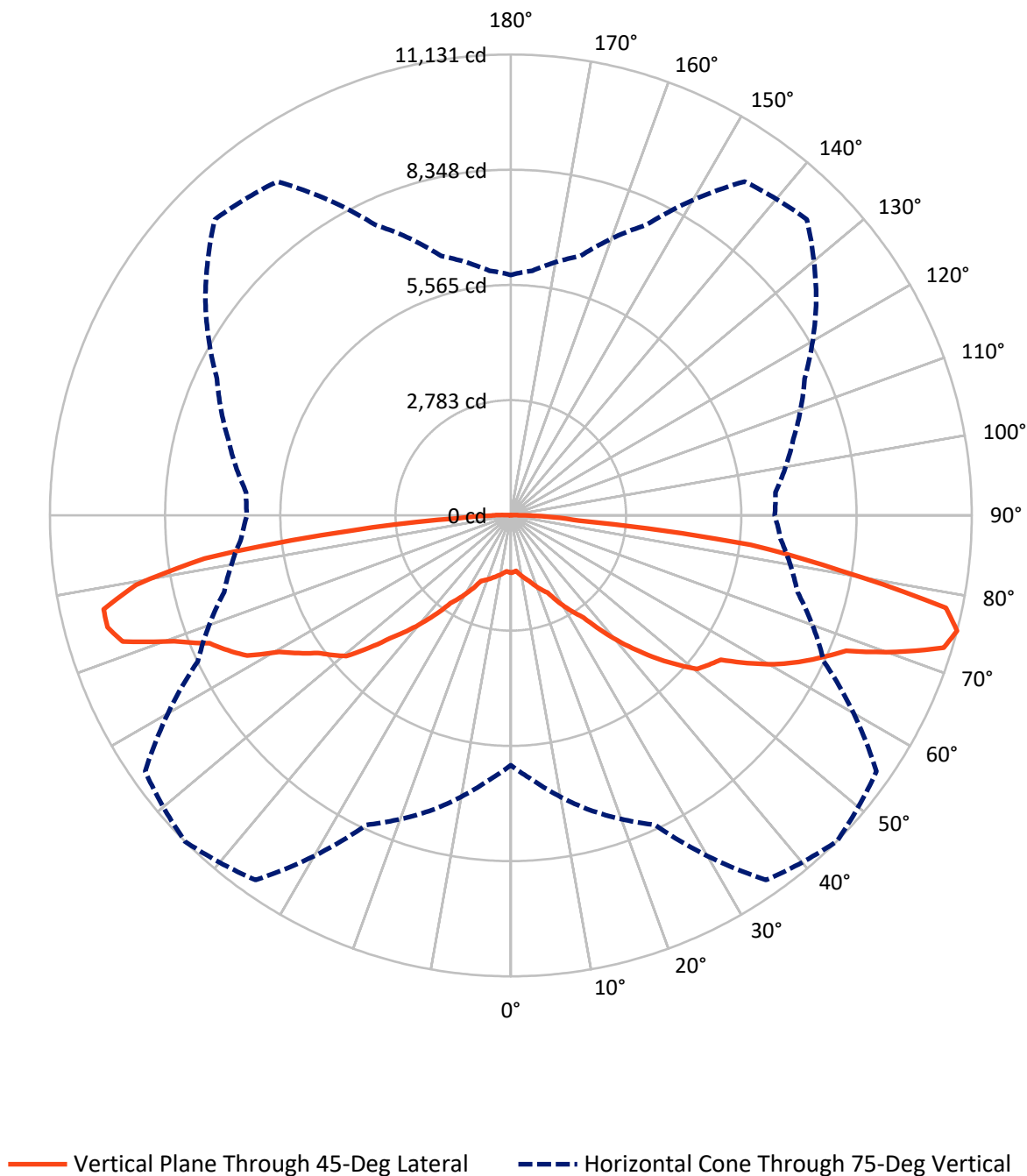
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
Type V - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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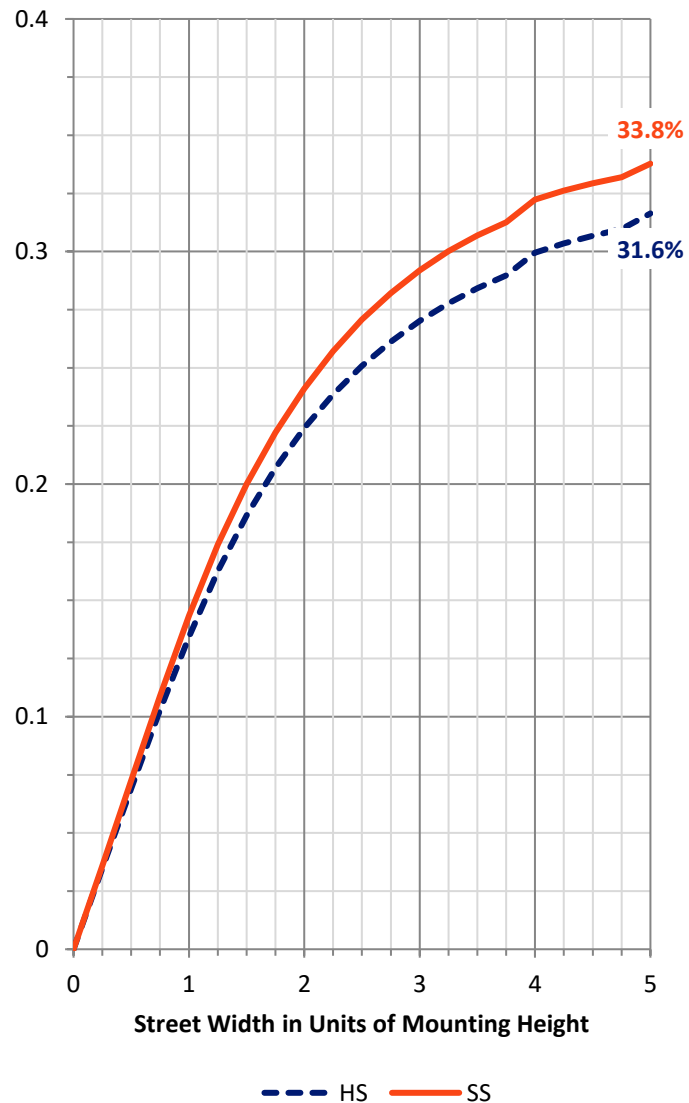
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14382.3	87.4	14469.6
	% Lamp	32.7	0.2	32.9
Street Side	Lumens	15176.0	63.4	15239.4
	% Lamp	34.5	0.1	34.6
Total	Lumens	29558.3	150.8	29709.0
	% Lamp	67.2	0.3	67.5

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	133.1	0.4	0.3
10°-20°	446.1	1.5	1.0
20°-30°	915.4	3.1	2.1
30°-40°	1814.9	6.1	4.1
40°-50°	3381.2	11.4	7.7
50°-60°	5130.7	17.3	11.7
60°-70°	7116.0	24.0	16.2
70°-80°	8146.6	27.4	18.5
80°-90°	2571.5	8.7	5.8
90°-100°	124.6	0.4	0.3
100°-110°	28.9	0.1	0.1
110°-120°	4.9	0.0	0.0
120°-130°	0.6	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°	29558.3	99.5	67.2
0°-180°	29709.0	100.0	67.5

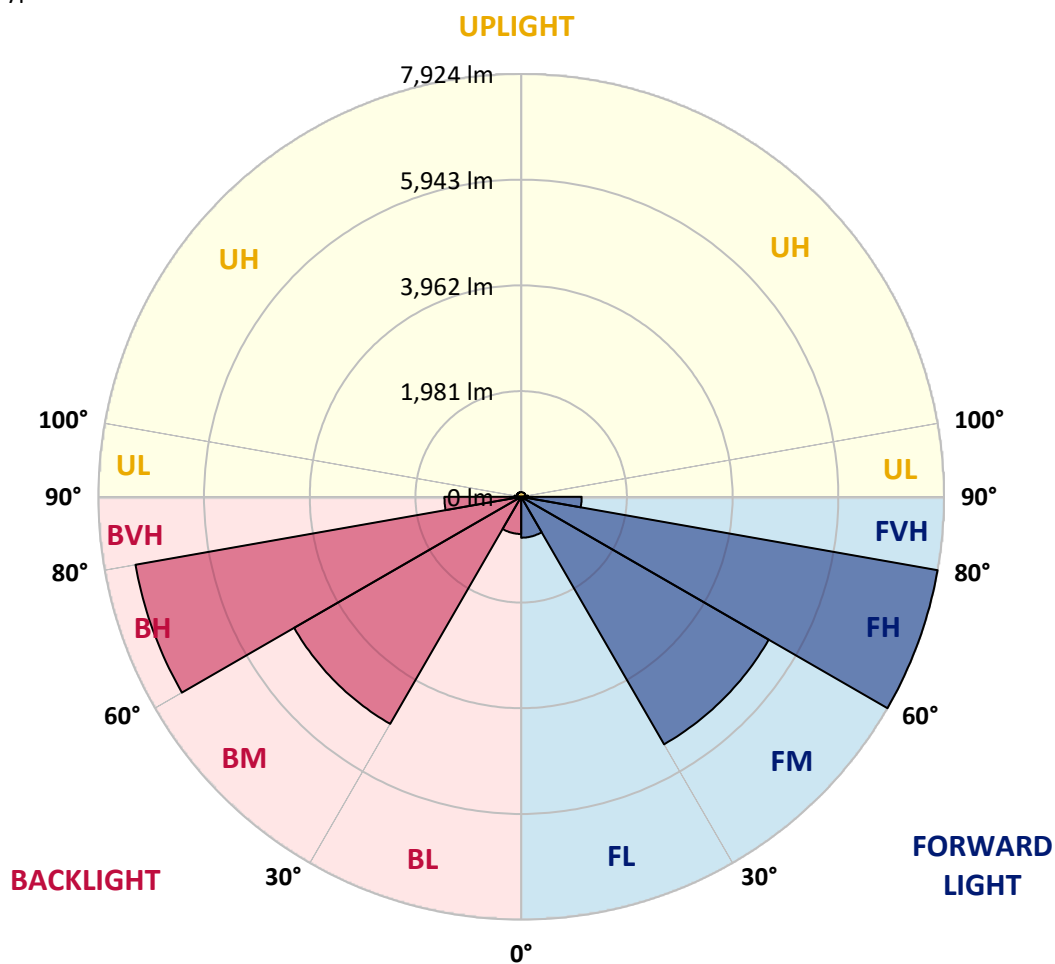


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	766.8	1.7			
FM	(30°-60°)	5356.6	12.2			
FH	(60°-80°)	7923.8	18.0			G4/12000
FVH	(80°-90°)	1133.4	2.6			G5
BL	(0°-30°)	696.6	1.6	B2/1000		
BM	(30°-60°)	4912.7	11.2	B3/5000		
BH	(60°-80°)	7338.8	16.7	B5		G3/7500
BVH	(80°-90°)	1438.2	3.3			G5
UL	(90°-100°)	124.6	0.3		U3/500	
UH	(100°-180°)	87.4	0.2		U3/500	
Trapped Light		14291.0	32.5			

BUG Rating: B5-U3-G5
Type V Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6
5°	1368.9	1311.4	1329.8	1329.8	1318.8	1348.1	1364.0	1344.4	1351.8	1339.6	1375.0
15°	1478.9	1460.6	1591.3	1680.6	1623.1	1640.2	1647.6	1609.7	1554.7	1566.9	1574.2
25°	1822.3	1795.4	1844.3	1966.6	2042.3	2069.2	2081.4	2027.7	1997.1	1893.2	1856.6
35°	2663.2	2547.1	2693.8	2888.1	3031.1	3031.1	2949.2	2945.6	2775.7	2720.7	2699.9
45°	4166.6	4221.6	4193.4	4714.1	4684.8	4915.8	4775.2	4851.0	4470.9	4609.0	4200.8
50°	5044.1	4764.2	4924.3	5557.4	5704.1	5831.2	5600.2	5770.1	5210.3	5248.2	5085.7
55°	5469.4	5061.2	5375.3	5965.7	6105.0	6151.4	6105.0	6035.3	5606.3	5591.7	5342.3
60°	5910.7	5779.9	6167.3	6949.6	7253.9	7301.6	7010.7	6837.1	6309.1	6096.4	6029.2
62.5°	6285.9	6184.4	6576.8	7466.6	7801.4	7801.4	7669.4	7403.0	6799.2	6459.4	6337.2
65°	6538.9	6435.0	6888.4	7825.9	8165.7	8261.0	8154.7	7693.9	7037.6	6602.4	6508.3
67.5°	6702.7	6608.6	7085.2	8154.7	8669.2	8732.8	8581.2	8048.3	7213.6	6811.4	6717.3
70°	6936.1	6923.9	7642.6	8628.9	9529.7	9876.8	9600.6	8452.9	7570.4	6998.4	6948.3
72.5°	6821.2	6974.0	8142.4	8859.9	10494.0	10932.8	10591.8	8894.1	7761.1	7209.9	6978.9
75°	6032.9	6433.8	7366.3	8245.1	10747.0	11130.8	10778.8	8339.2	7168.3	6537.7	6373.9
77.5°	5396.1	5469.4	5555.0	7086.4	10586.9	10744.6	9958.7	7407.9	5922.9	5935.1	5825.1
80°	3950.2	3941.7	4143.3	4962.2	7801.4	8063.0	7201.3	4714.1	4309.6	3933.1	5067.3
82.5°	2907.7	2604.6	2608.2	3025.0	4246.0	5828.8	4571.1	3478.4	2493.3	2461.6	3473.6
85°	825.0	1080.4	1192.9	1476.4	1637.8	1658.6	1828.4	1454.4	1078.0	1046.2	1260.1
87.5°	343.4	374.0	506.0	559.8	712.6	878.8	822.6	696.7	490.1	367.9	407.0
90°	122.2	124.7	165.0	201.7	206.6	210.2	265.2	222.4	183.3	149.1	143.0
95°	33.0	40.3	77.0	81.9	100.2	69.7	103.9	75.8	61.1	40.3	30.6
105°	3.7	6.1	18.3	26.9	14.7	8.6	8.6	18.3	12.2	3.7	2.4
115°	3.7	3.7	3.7	3.7	3.7	3.7	2.4	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
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°	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6
5°	1370.1	1368.9	1360.3	1356.7	1354.2	1362.8	1399.4	1375.0	1388.4	1372.6
15°	1555.9	1588.9	1576.7	1558.3	1533.9	1480.1	1439.8	1394.6	1342.0	1323.7
25°	1852.9	1799.1	1778.3	1768.6	1740.4	1713.6	1667.1	1631.7	1531.4	1540.0
35°	2632.7	2605.8	2583.8	2620.4	2569.1	2499.4	2413.9	2346.7	2252.6	2222.0
45°	4310.8	4522.2	4131.1	4516.1	4154.3	4008.9	3896.4	3933.1	3768.1	3746.1
50°	5077.1	5248.2	5234.8	5467.0	5229.9	4997.7	4797.2	4629.8	4562.6	4391.4
55°	5375.3	5610.0	5801.9	5831.2	5718.8	5426.7	5366.8	5046.6	4912.1	4967.1
60°	5986.4	6204.0	6383.7	6568.2	6492.4	6300.6	6074.4	5832.4	5412.0	5481.7
62.5°	6312.8	6501.0	6788.2	7082.8	7213.6	6960.6	6645.2	6139.2	5832.4	5738.3
65°	6543.8	6739.3	7191.6	7407.9	7566.8	7278.3	6911.7	6358.0	5920.4	5910.7
67.5°	6705.1	6942.2	7505.7	7730.6	7905.3	7579.0	7192.8	6441.1	5993.8	5963.2
70°	6966.7	7201.3	7810.0	8257.3	8677.8	8426.0	7636.4	6700.2	6197.9	6167.3
72.5°	7058.3	7514.2	8324.6	9122.7	9856.0	9568.8	8215.8	6966.7	6367.8	6172.2
75°	6415.4	7060.8	7830.8	9002.9	10107.8	9840.1	7740.3	6483.9	5931.4	5808.0
77.5°	5520.8	6048.8	6888.4	8470.0	10090.7	9950.1	6937.3	5542.8	5085.7	5024.6
80°	3978.3	4087.1	4881.6	7165.9	9202.1	8361.2	5381.4	4356.0	4225.2	3920.9
82.5°	2775.7	3126.4	3733.9	5354.6	7470.2	6065.9	4109.1	3226.7	3469.9	3341.6
85°	1119.6	1384.8	1972.7	2596.0	3889.1	2857.6	2332.0	1698.9	1772.2	1601.1
87.5°	463.2	739.4	928.9	1350.6	1232.0	1409.2	1104.9	798.1	721.1	723.6
90°	155.2	222.4	325.1	359.3	471.8	392.3	389.9	298.2	265.2	207.8
95°	42.8	75.8	85.6	116.1	96.6	102.7	100.2	81.9	51.3	48.9
105°	3.7	15.9	22.0	20.8	14.7	15.9	24.4	20.8	8.6	3.7
115°	2.4	2.4	2.4	3.7	3.7	3.7	3.7	3.7	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)