

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: 765528_400MP

Luminaire Tested:

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 765528_400MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number:
Description: 400W MH TYPE IV AREA
Light Source: 400 WATT PULSE-START CLEAR ED-37 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 40000 (1 lamp)
Luminaire Lumens: 20861.1 lumens
Efficiency: 52.2%
Efficacy: 46.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.81' x L: 1.81' x H: 0.83')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U2 - G3

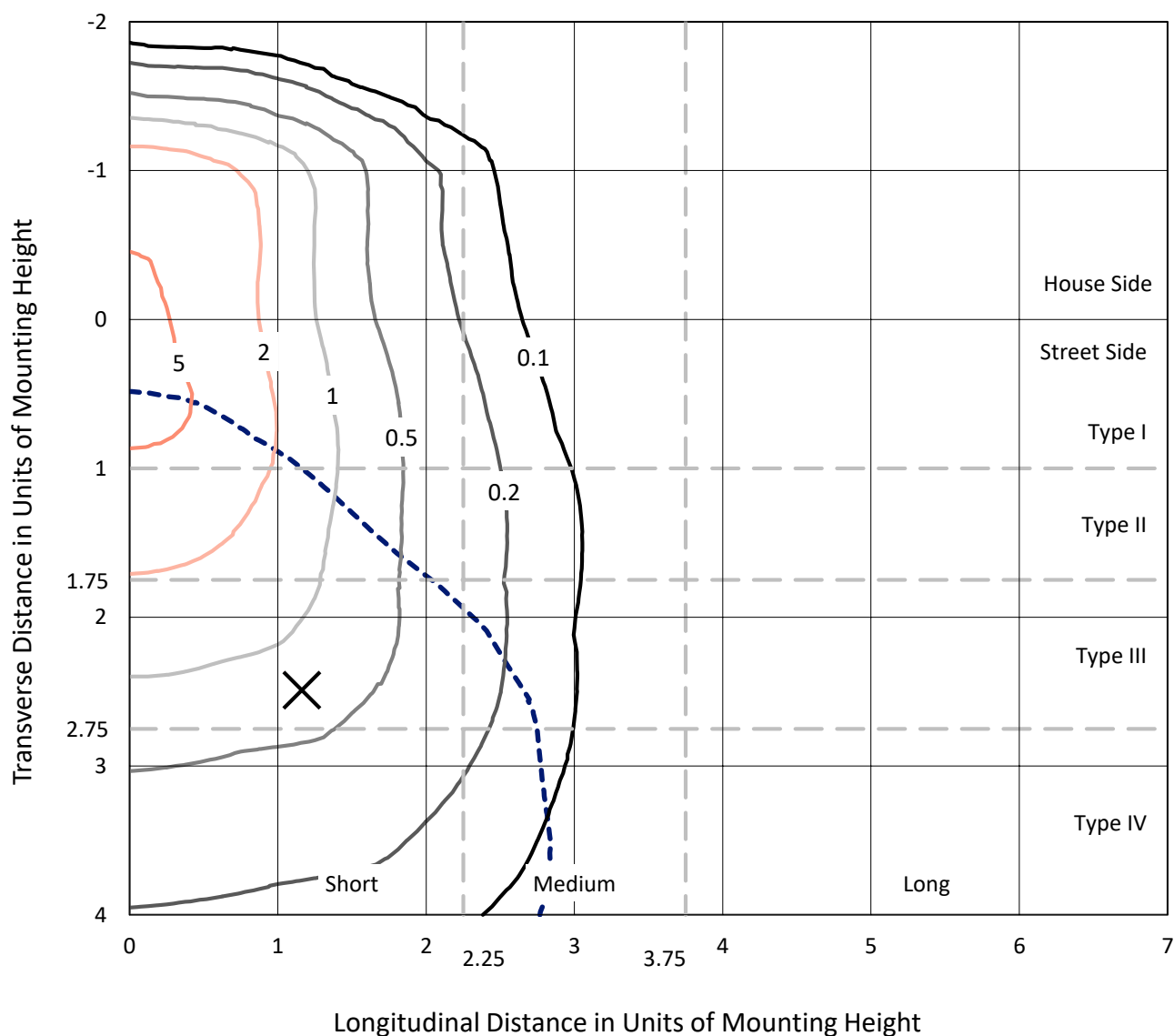
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

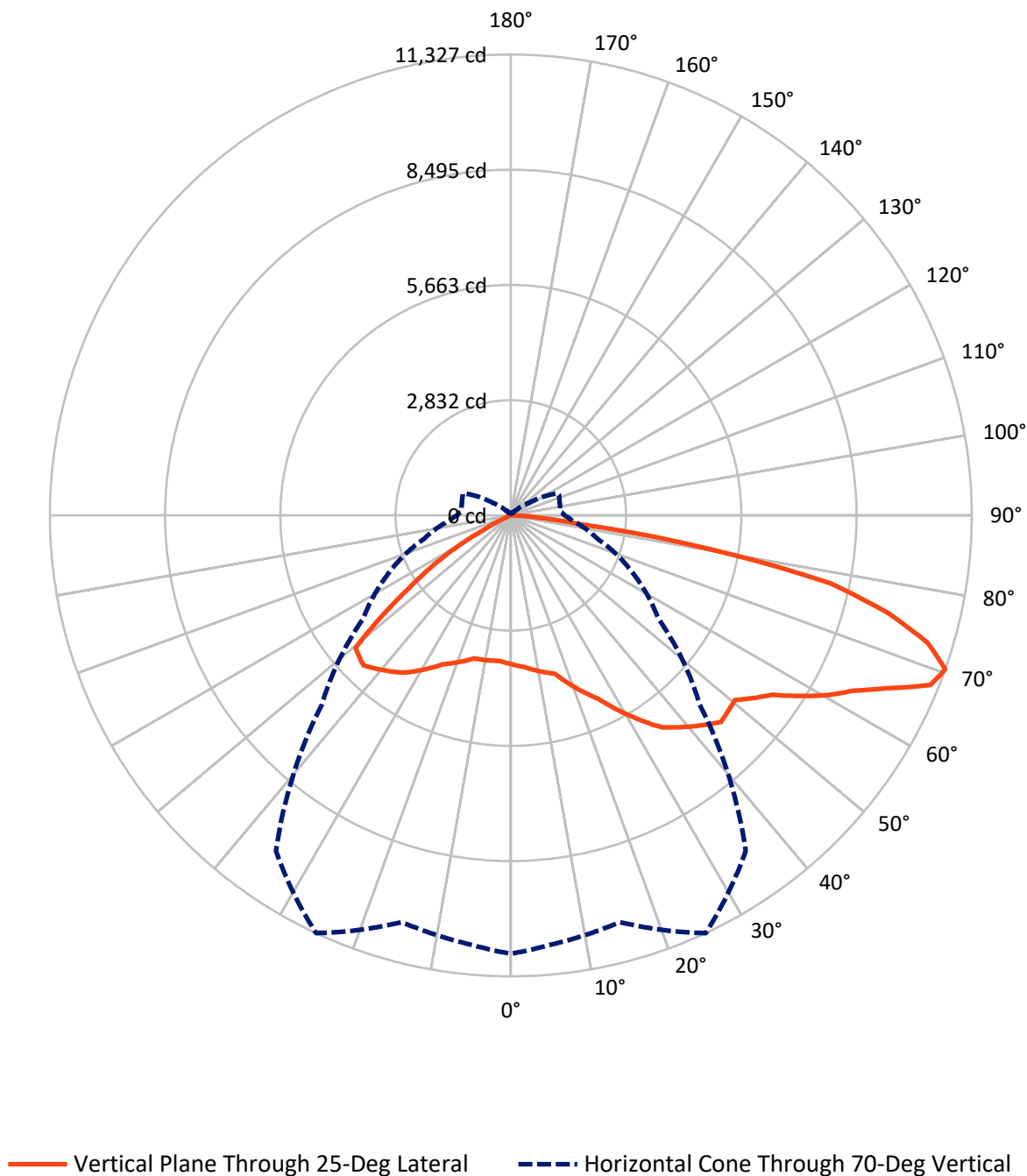
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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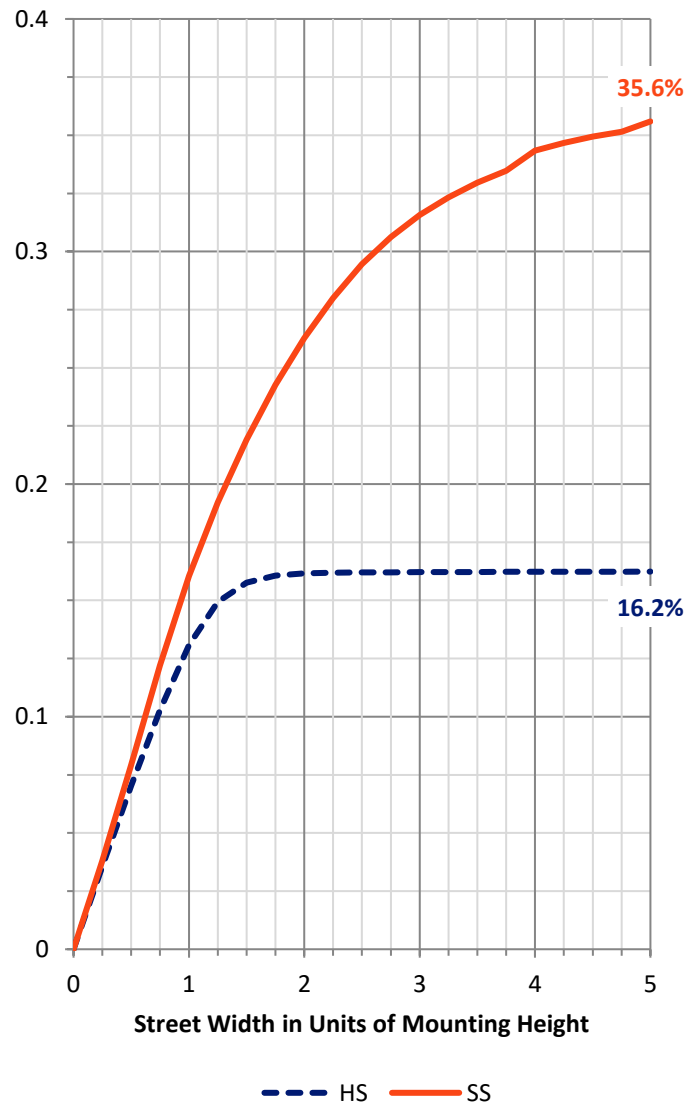
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6526.0	3.0	6529.0
	% Lamp	16.3	0.0	16.3
Street Side	Lumens	14309.0	23.2	14332.2
	% Lamp	35.8	0.1	35.8
Total	Lumens	20835.0	26.1	20861.1
	% Lamp	52.1	0.1	52.2

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	349.9	1.7	0.9
10°-20°	1067.2	5.1	2.7
20°-30°	1879.5	9.0	4.7
30°-40°	2815.7	13.5	7.0
40°-50°	3667.0	17.6	9.2
50°-60°	4018.1	19.3	10.0
60°-70°	3849.6	18.5	9.6
70°-80°	2784.8	13.3	7.0
80°-90°	362.8	1.7	0.9
90°-100°	14.6	0.1	0.0
100°-110°	7.6	0.0	0.0
110°-120°	3.6	0.0	0.0
120°-130°	0.9	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°	20835.0	99.9	52.1
0°-180°	20861.1	100.0	52.2

Coefficient of Utilization



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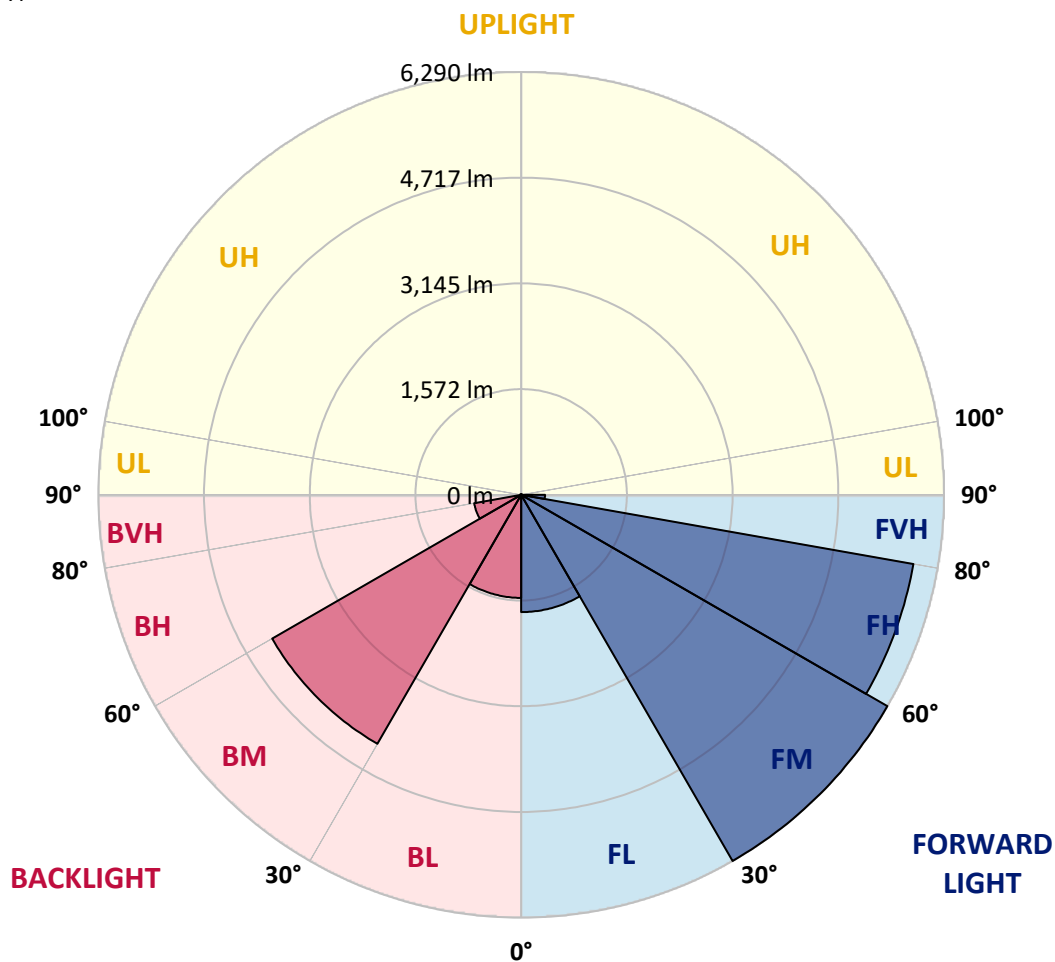
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1744.1	4.4			
FM	(30°-60°)	6289.7	15.7			
FH	(60°-80°)	5924.4	14.8			G3/7500
FVH	(80°-90°)	354.6	0.9			G3/500
BL	(0°-30°)	1533.0	3.8	B3/2500		
BM	(30°-60°)	4276.4	10.7	B3/5000		
BH	(60°-80°)	710.0	1.8	B2/1000		G2/1000
BVH	(80°-90°)	8.3	0.0			G0/10
UL	(90°-100°)	14.6	0.0		U2/50	
UH	(100°-180°)	3.0	0.0		U1/10	
Trapped Light		19138.9	47.8			

BUG Rating: B3-U2-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4
5°	3758.6	3756.2	3764.7	3751.4	3733.2	3721.0	3704.1	3690.7	3670.1	3662.8	3644.6
15°	4160.1	4152.8	4115.2	4037.6	3929.7	3832.6	3763.5	3689.5	3597.3	3522.1	3485.7
25°	5495.5	5506.4	5328.1	4993.3	4752.0	4274.1	3877.5	3614.3	3445.7	3315.9	3257.7
35°	7005.5	6959.4	6739.8	6397.8	5856.9	5175.3	4431.8	3706.5	3379.0	3170.4	3078.2
45°	7403.3	7408.1	7417.8	7240.8	6654.9	5660.4	4662.2	3764.7	3180.1	2875.7	2805.3
50°	7678.6	7637.4	7531.8	7132.8	6525.2	5832.6	4839.3	3803.5	3143.7	2775.0	2661.0
55°	8653.7	8675.6	8254.7	7782.9	6925.4	6080.0	4964.2	3809.6	3085.5	2616.1	2437.8
60°	9780.5	9735.6	9569.4	8966.6	7810.8	6234.1	4858.7	3705.3	2987.3	2418.4	2200.1
62.5°	10168.6	10053.4	9844.8	9476.0	8195.3	6274.1	4722.9	3631.3	2920.6	2303.2	2069.1
65°	10526.4	10654.9	10422.1	10229.2	8770.2	6306.9	4583.4	3544.0	2737.4	2100.7	1875.1
67.5°	11041.8	11055.2	10810.2	11121.9	9673.7	6350.5	4511.8	3426.3	2510.6	1839.9	1631.3
70°	10773.8	10602.8	10346.9	11326.9	10064.3	6561.6	4428.1	3286.8	2200.1	1517.3	1324.4
72.5°	9900.5	9780.5	9541.5	10714.4	9258.9	6630.7	4195.3	3028.5	1762.3	1071.0	1018.8
75°	9175.3	9075.8	8721.6	9570.6	8010.9	6044.9	3265.0	2171.0	1170.4	713.2	715.6
77.5°	6856.3	6509.4	7115.8	8025.5	6582.2	4220.7	1903.0	1188.6	646.5	464.5	327.5
80°	2942.4	3175.3	3978.2	4855.1	3758.6	2386.9	1186.2	784.7	456.0	271.7	218.3
82.5°	1282.0	1126.7	1388.7	1601.0	1849.6	977.6	623.4	473.0	251.1	146.8	117.6
85°	627.0	593.1	732.6	658.6	435.4	354.2	246.2	121.3	84.9	53.4	42.4
87.5°	263.2	234.1	292.3	178.3	161.3	151.6	81.3	27.9	19.4	8.5	8.5
90°	66.7	76.4	71.6	53.4	55.8	57.0	31.5	12.1	8.5	4.9	4.9
95°	12.1	12.1	31.5	40.0	35.2	41.2	17.0	12.1	6.1	4.9	4.9
105°	0.0	0.0	0.0	24.3	40.0	4.9	8.5	9.7	6.1	6.1	6.1
115°	0.0	0.0	0.0	3.6	9.7	4.9	6.1	8.5	8.5	8.5	6.1
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°	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4	3660.4
5°	3659.2	3637.4	3608.2	3582.8	3580.4	3580.4	3585.2	3586.4	3580.4	3581.6
15°	3451.8	3437.2	3455.4	3476.0	3530.6	3577.9	3628.9	3668.9	3694.4	3685.9
25°	3223.8	3232.3	3320.8	3451.8	3650.7	3847.2	4019.4	4126.1	4121.3	4183.1
35°	3024.9	3077.0	3303.8	3662.8	4059.4	4437.8	4688.9	4754.4	4756.8	4749.5
45°	2770.2	2953.3	3388.7	3928.4	4573.7	5054.0	5166.8	5285.6	5461.5	5499.1
50°	2629.5	2806.5	3258.9	3923.6	4735.0	5322.0	5017.6	4601.6	4470.6	4350.5
55°	2393.0	2505.8	2977.6	3877.5	4937.5	4042.4	3056.4	2468.2	2220.7	2350.5
60°	2106.7	2140.7	2673.1	3648.3	3189.8	2049.7	1596.1	1006.7	795.6	930.3
62.5°	1960.0	1939.4	2433.0	3096.4	1974.5	1356.0	783.5	483.9	363.9	424.5
65°	1755.0	1721.0	2162.5	2015.8	978.8	555.5	333.5	223.2	172.2	133.4
67.5°	1503.9	1493.0	1943.0	1056.4	394.2	198.9	128.6	89.8	78.8	72.8
70°	1216.5	1242.0	1294.1	525.2	173.4	74.0	52.2	58.2	66.7	69.1
72.5°	949.7	930.3	628.3	235.3	77.6	42.4	36.4	42.4	71.6	82.5
75°	578.5	492.4	243.8	112.8	44.9	27.9	26.7	32.7	72.8	82.5
77.5°	315.3	191.6	94.6	47.3	26.7	19.4	17.0	27.9	40.0	47.3
80°	327.5	82.5	52.2	25.5	17.0	10.9	15.8	14.6	20.6	25.5
82.5°	87.3	44.9	26.7	12.1	6.1	0.0	4.9	4.9	4.9	9.7
85°	30.3	14.6	8.5	3.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.1	4.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	4.9	3.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	4.9	3.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	6.1	6.1	4.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0
115°	8.5	6.1	4.9	3.6	1.2	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
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)