

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P399633

Luminaire Tested: **ARCH-L-PA3-170-730-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399633  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-170-730-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18983 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

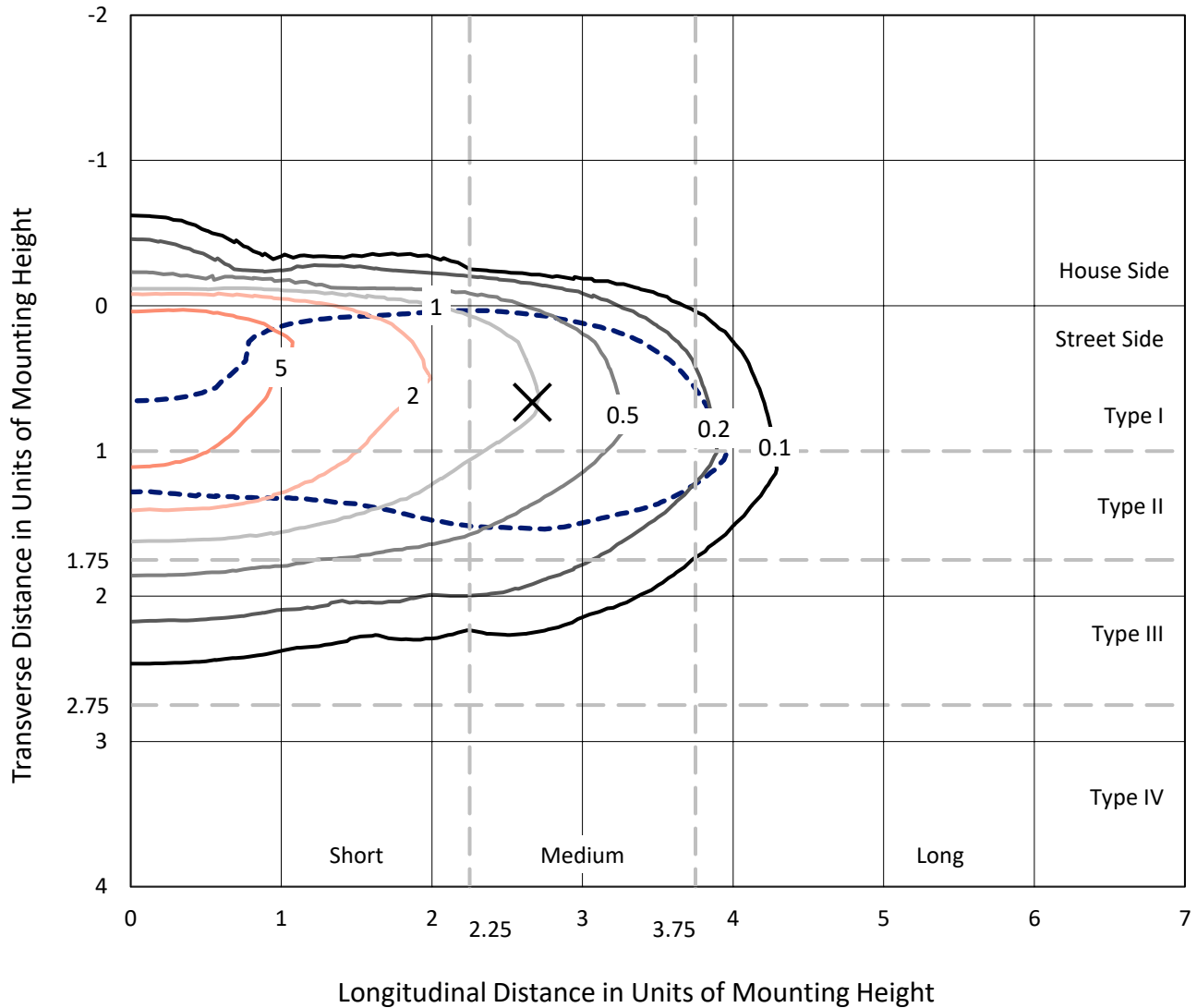
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399633  
 CATALOG NUMBER: ARCH-L-PA3-170-730-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

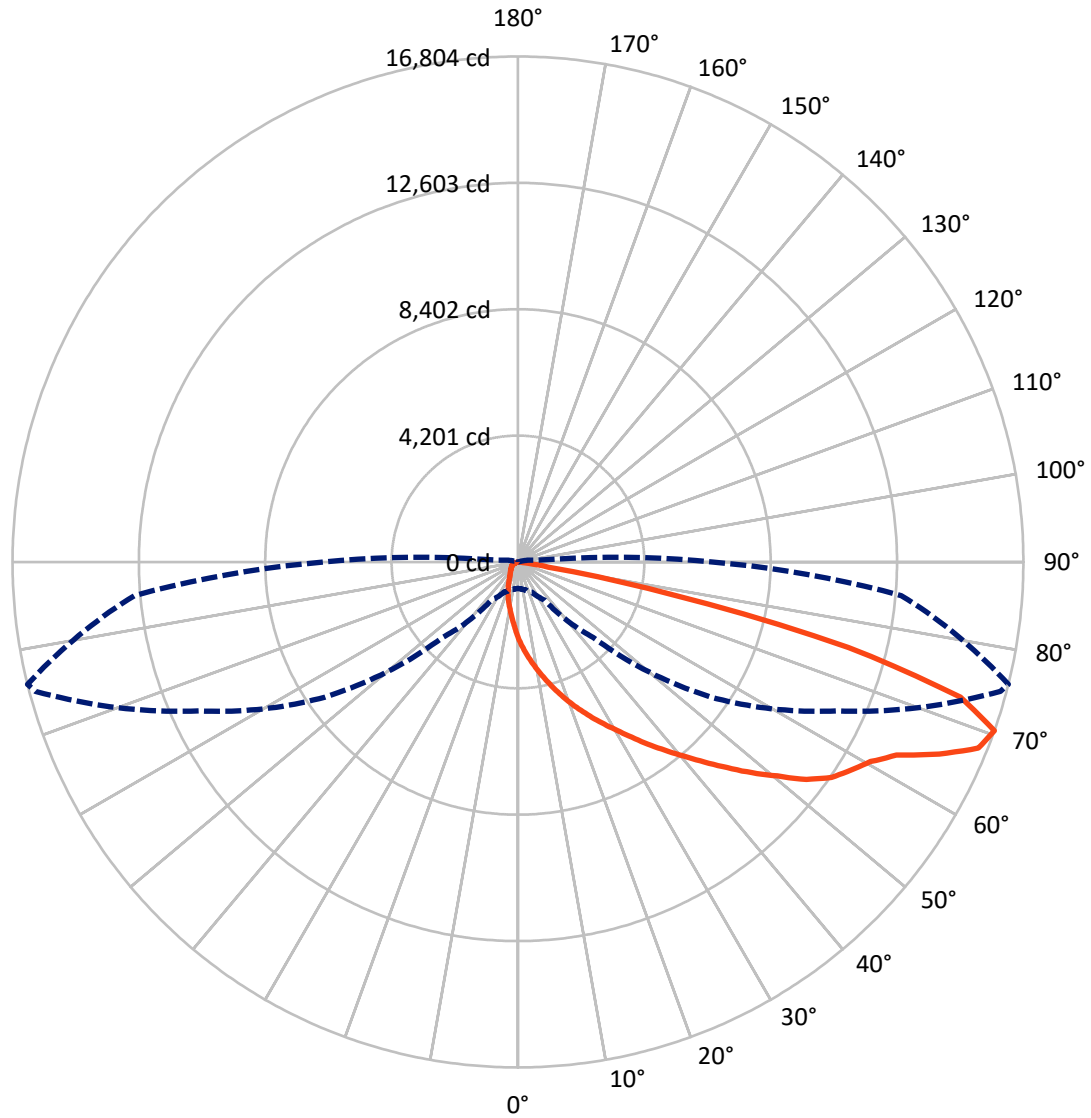
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc  
 Type II - Medium - N/A

REPORT NUMBER: P399633  
CATALOG NUMBER: ARCH-L-PA3-170-730-U-T2R-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P399633  
 CATALOG NUMBER: ARCH-L-PA3-170-730-U-T2R-HSS

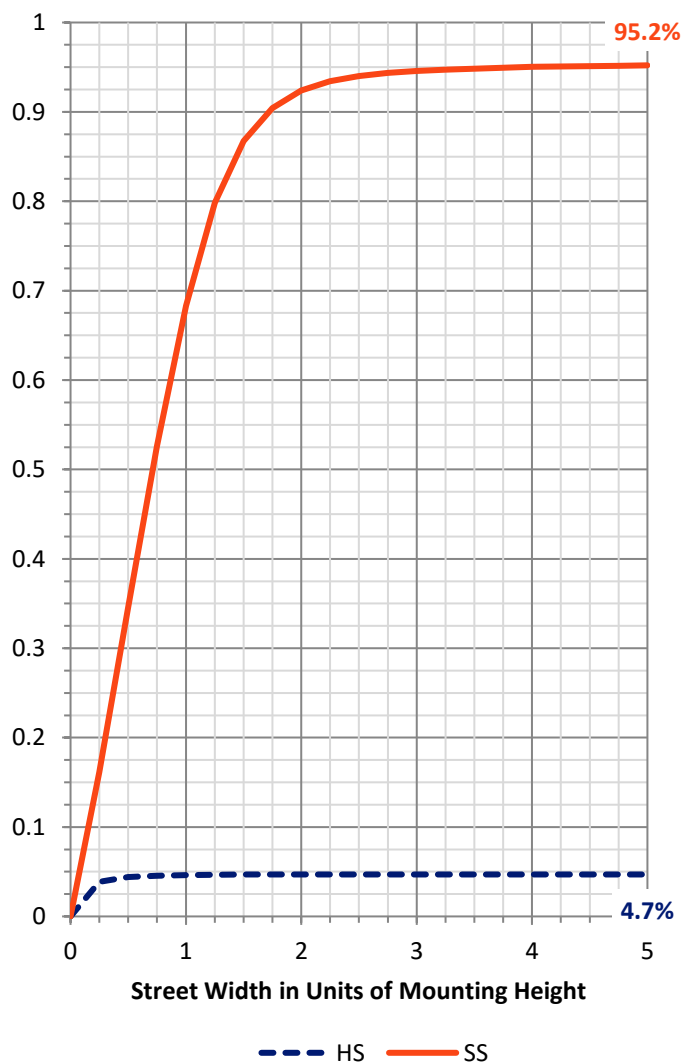
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	895.3	0.0	895.3
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	18087.7	0.0	18087.7
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	18983.0	0.0	18983.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.4	1.3
10°-20°	772.6	4.1
20°-30°	1438.9	7.6
30°-40°	2545.0	13.4
40°-50°	3891.9	20.5
50°-60°	4412.5	23.2
60°-70°	3782.6	19.9
70°-80°	1832.1	9.7
80°-90°	68.0	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	18983.0	100.0
0°-180°	18983.0	100.0

**Coefficient of Utilization**

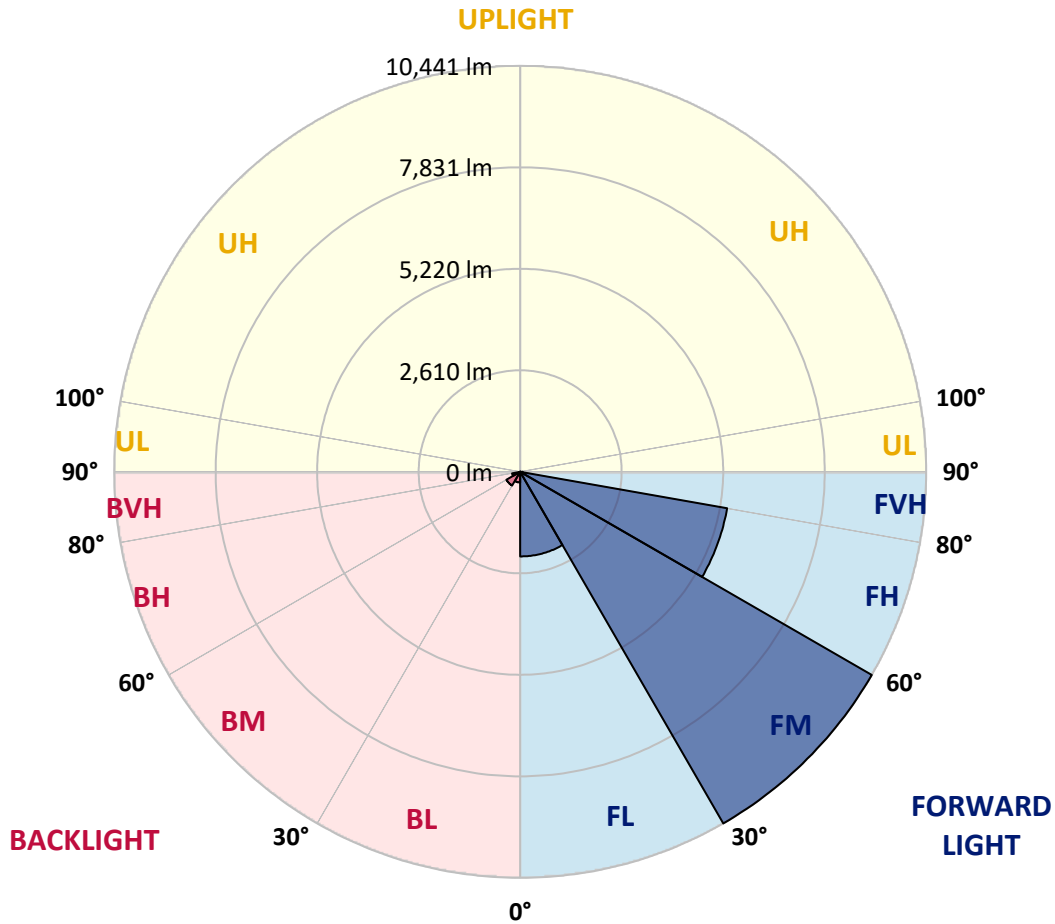


REPORT NUMBER: P399633  
 CATALOG NUMBER: ARCH-L-PA3-170-730-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2176.2	11.5			
FM (30°-60°)	10440.8	55.0			
FH (60°-80°)	5403.9	28.5			G3/7500
FVH (80°-90°)	66.8	0.4			G1/100
BL (0°-30°)	274.6	1.4	B1/500		
BM (30°-60°)	408.7	2.2	B1/1000		
BH (60°-80°)	210.8	1.1	B1/500		G1/500
BVH (80°-90°)	1.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**  
 Type II Medium





REPORT NUMBER: P399633

CATALOG NUMBER: ARCH-L-PA3-170-730-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0
2.5°	3473.3	3454.4	3435.4	3362.7	3296.3	3236.3	3122.5	2974.0	2841.2	2812.8	2657.9
5°	4080.1	4058.0	4029.6	3956.9	3871.5	3770.4	3602.9	3375.4	3141.5	3090.9	2803.3
7.5°	4491.0	4472.0	4430.9	4396.2	4310.8	4212.9	4026.4	3760.9	3438.6	3375.4	2970.8
10°	4772.3	4759.6	4753.3	4724.9	4661.7	4582.6	4396.2	4118.1	3738.8	3666.1	3147.8
12.5°	4873.4	4873.4	4905.0	4952.4	4961.9	4936.6	4765.9	4487.8	4054.8	3979.0	3356.4
15°	4737.5	4753.3	4822.8	4974.5	5132.6	5236.9	5129.4	4870.2	4402.5	4320.3	3602.9
17.5°	4699.6	4715.4	4762.8	4895.5	5107.3	5385.4	5439.1	5240.0	4731.2	4661.7	3855.7
20°	4807.0	4822.8	4863.9	4977.7	5138.9	5420.2	5644.6	5597.1	5078.8	5006.1	4111.7
22.5°	5063.0	5072.5	5072.5	5161.0	5303.2	5511.8	5774.1	5935.3	5436.0	5357.0	4364.6
25°	5612.9	5594.0	5518.1	5473.9	5565.5	5736.2	5938.5	6232.4	5834.2	5726.7	4636.4
27.5°	6333.5	6396.7	6213.4	6001.7	5932.2	6030.1	6169.2	6494.7	6219.8	6106.0	4882.9
30°	7310.1	7284.8	7044.6	6741.2	6441.0	6406.2	6453.6	6719.1	6605.3	6497.9	5157.8
32.5°	8112.9	8160.3	7907.4	7537.7	7088.9	6877.1	6826.6	6987.7	7016.2	6946.7	5483.4
35°	8937.7	8988.3	8741.8	8330.9	7796.8	7442.8	7297.5	7319.6	7525.0	7436.5	5824.7
37.5°	9677.3	9721.5	9478.2	9057.8	8523.7	8090.7	7882.1	7711.5	8018.0	7939.0	6185.0
40°	10239.8	10246.2	10081.8	9705.7	9200.1	8751.3	8514.2	8179.2	8539.5	8485.8	6561.1
42.5°	10638.1	10650.7	10530.6	10208.2	9740.5	9323.3	9130.5	8732.3	9140.0	9092.6	6997.2
45°	10824.5	10846.6	10834.0	10536.9	10148.2	9787.9	9724.7	9320.1	9797.4	9753.1	7499.7
47.5°	10647.5	10647.5	10808.7	10767.6	10410.5	10170.3	10243.0	9933.3	10511.6	10470.5	8011.7
50°	9911.2	9920.6	10249.3	10720.2	10511.6	10457.9	10685.5	10533.8	11159.5	11184.8	8624.8
52.5°	7977.0	7961.2	9070.5	9974.4	10442.1	10587.5	11093.2	11146.9	11937.0	12012.8	9234.8
55°	5960.6	5951.1	7013.0	8653.3	9955.4	10521.1	11320.7	11693.6	12600.7	12648.1	9689.9
57.5°	4718.5	4693.3	5277.9	6975.1	8855.6	10224.0	11330.2	11797.9	12970.5	13052.6	10132.4
60°	3628.2	3606.1	4042.2	5189.4	7297.5	9433.9	11058.4	11804.3	13327.6	13473.0	10726.5
62.5°	2594.7	2620.0	2955.0	3723.0	5612.9	8318.3	10704.4	11892.7	13962.8	14127.2	11570.4
65°	1750.9	1738.2	2016.4	2534.7	3991.6	6817.1	10160.8	12079.2	15106.9	15394.5	12581.7
67.5°	1216.8	1226.3	1352.7	1649.8	2534.7	5233.7	9256.9	12183.5	16288.9	16513.3	13289.7
70°	878.6	891.2	960.8	1109.3	1548.6	3549.2	7825.3	11706.3	16608.1	16804.1	12796.6
72.5°	578.4	603.6	707.9	787.0	989.2	2221.8	5764.6	10085.0	15233.3	15378.7	10736.0
75°	312.9	319.2	455.1	587.8	704.8	1384.3	3438.6	6801.3	11396.6	11349.2	7079.4
77.5°	243.4	252.8	281.3	420.3	474.1	761.7	1359.0	3072.0	5398.0	5252.7	2414.6
80°	148.5	154.9	195.9	249.7	331.8	442.5	398.2	834.4	1096.7	1027.1	354.0
82.5°	88.5	94.8	116.9	208.6	262.3	208.6	139.1	202.3	205.4	202.3	88.5
85°	15.8	15.8	82.2	145.4	139.1	60.0	82.2	66.4	60.0	63.2	19.0
87.5°	0.0	0.0	31.6	44.2	63.2	22.1	31.6	15.8	15.8	15.8	9.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399633

CATALOG NUMBER: ARCH-L-PA3-170-730-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0	2541.0
2.5°	2563.1	2455.7	2234.4	2041.6	1848.9	1706.6	1599.2	1488.6	1450.6	1403.2	1378.0
5°	2607.4	2395.6	1956.3	1605.5	1308.4	1080.9	935.5	847.0	790.1	749.0	739.5
7.5°	2673.7	2348.2	1731.9	1257.9	932.3	704.8	584.7	524.6	493.0	474.1	467.7
10°	2752.7	2307.1	1510.7	979.7	657.4	496.2	429.8	404.5	391.9	385.6	382.4
12.5°	2863.4	2291.3	1324.2	755.3	496.2	407.7	372.9	357.1	347.6	338.2	335.0
15°	3008.7	2297.6	1153.6	584.7	410.9	363.5	335.0	319.2	306.6	297.1	297.1
17.5°	3160.4	2307.1	986.1	474.1	372.9	331.8	300.2	278.1	268.6	259.2	256.0
20°	3302.7	2304.0	824.9	404.5	338.2	297.1	265.5	243.4	227.6	218.1	218.1
22.5°	3438.6	2285.0	673.2	363.5	309.7	262.3	227.6	205.4	192.8	183.3	183.3
25°	3583.9	2247.1	549.9	331.8	275.0	230.7	195.9	173.8	164.3	154.9	154.9
27.5°	3697.7	2183.9	448.8	303.4	243.4	199.1	167.5	148.5	139.1	132.7	132.7
30°	3821.0	2092.2	372.9	271.8	211.7	170.7	142.2	126.4	116.9	113.8	113.8
32.5°	3956.9	1991.1	319.2	240.2	180.1	145.4	120.1	110.6	101.1	98.0	98.0
35°	4114.9	1902.6	287.6	208.6	158.0	123.3	104.3	94.8	88.5	88.5	88.5
37.5°	4295.0	1810.9	259.2	183.3	135.9	104.3	88.5	85.3	82.2	79.0	79.0
40°	4491.0	1713.0	233.9	161.2	116.9	88.5	75.9	75.9	72.7	72.7	72.7
42.5°	4712.2	1627.6	211.7	142.2	101.1	75.9	66.4	66.4	63.2	63.2	63.2
45°	4952.4	1548.6	192.8	126.4	88.5	66.4	60.0	56.9	53.7	53.7	53.7
47.5°	5236.9	1504.4	177.0	110.6	75.9	56.9	50.6	47.4	44.2	41.1	41.1
50°	5600.3	1523.3	161.2	91.7	66.4	47.4	41.1	37.9	34.8	31.6	31.6
52.5°	5887.9	1513.9	139.1	79.0	53.7	37.9	31.6	28.4	25.3	22.1	22.1
55°	6096.5	1475.9	120.1	66.4	41.1	31.6	25.3	19.0	15.8	15.8	15.8
57.5°	6301.9	1438.0	101.1	53.7	31.6	22.1	15.8	12.6	12.6	12.6	12.6
60°	6621.1	1384.3	88.5	44.2	25.3	15.8	9.5	9.5	6.3	6.3	6.3
62.5°	7009.9	1317.9	72.7	37.9	19.0	12.6	6.3	6.3	0.0	0.0	0.0
65°	7436.5	1201.0	60.0	28.4	15.8	9.5	6.3	0.0	0.0	0.0	0.0
67.5°	7338.5	963.9	50.6	19.0	12.6	6.3	3.2	0.0	0.0	0.0	0.0
70°	6491.6	651.1	41.1	15.8	9.5	6.3	3.2	0.0	0.0	0.0	0.0
72.5°	5085.2	385.6	28.4	12.6	6.3	3.2	0.0	0.0	0.0	0.0	0.0
75°	3255.3	192.8	19.0	9.5	6.3	3.2	0.0	0.0	0.0	0.0	0.0
77.5°	1090.4	94.8	12.6	6.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	154.9	31.6	6.3	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.8	12.6	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.6	6.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)