

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: P400371

Luminaire Tested: **ARCH-L-PA3-270-750-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400371  
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-PA3-270-750-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1155mA 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: 28165 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G4

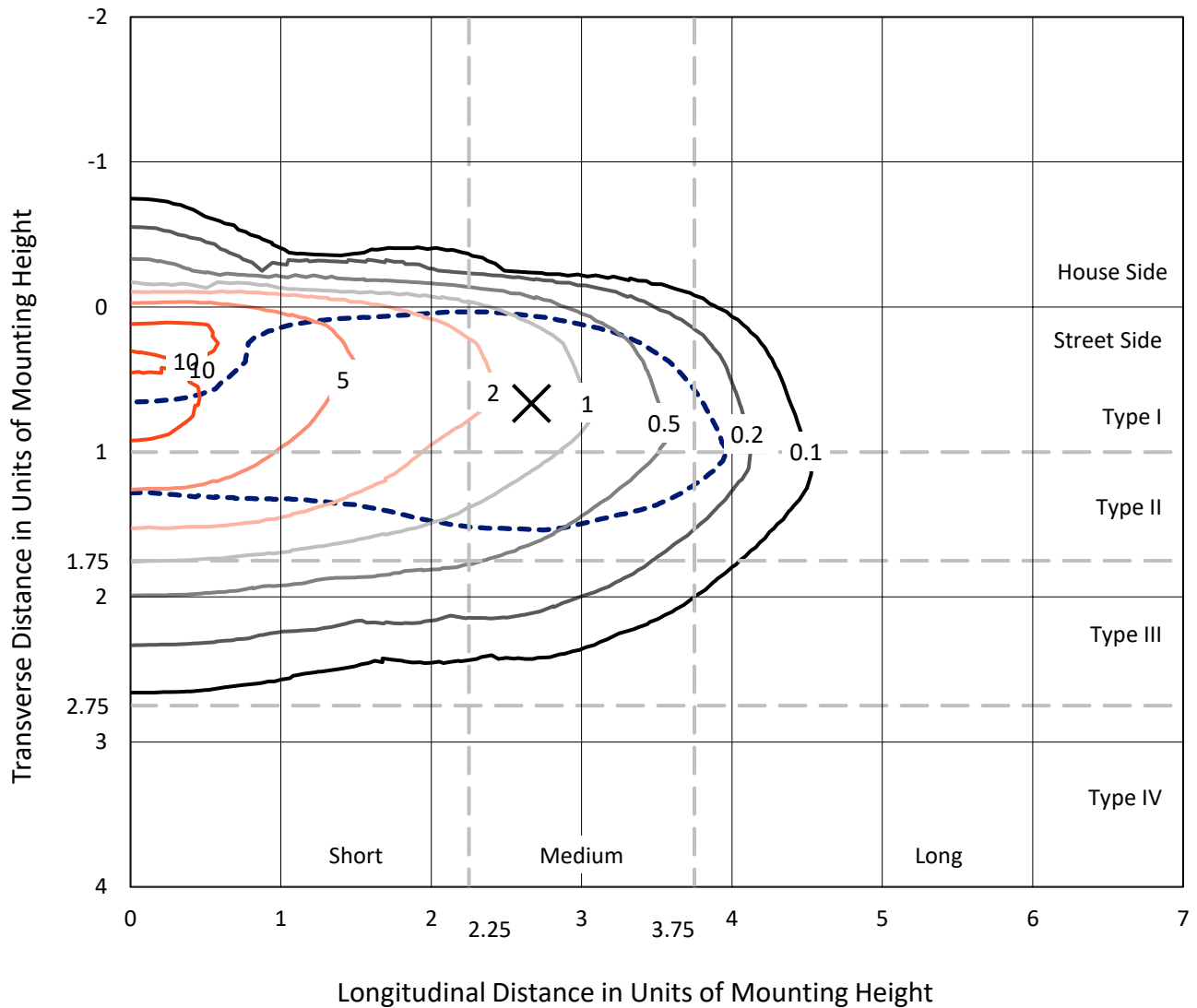
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P400371  
 CATALOG NUMBER: ARCH-L-PA3-270-750-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

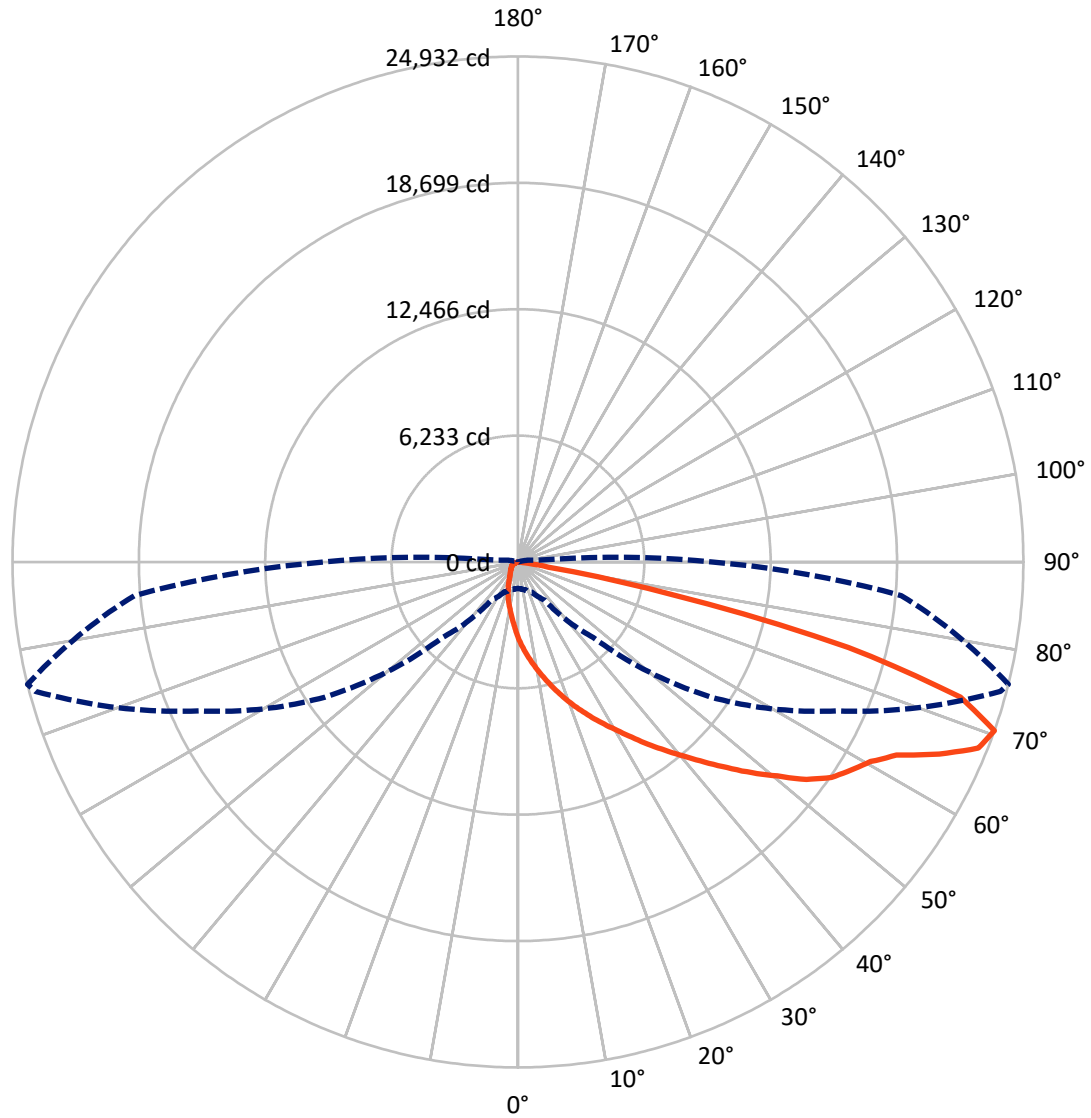
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.5 fc  
 Type II - Medium - N/A

REPORT NUMBER: P400371  
CATALOG NUMBER: ARCH-L-PA3-270-750-U-T2R-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P400371  
 CATALOG NUMBER: ARCH-L-PA3-270-750-U-T2R-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1328.4	0.0	1328.4
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	26836.7	0.0	26836.7
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	28165.0	0.0	28165.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	355.2	1.3
10°-20°	1146.3	4.1
20°-30°	2134.8	7.6
30°-40°	3776.0	13.4
40°-50°	5774.5	20.5
50°-60°	6546.9	23.2
60°-70°	5612.3	19.9
70°-80°	2718.3	9.7
80°-90°	100.8	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°	28165.0	100.0
0°-180°	28165.0	100.0

**Coefficient of Utilization**

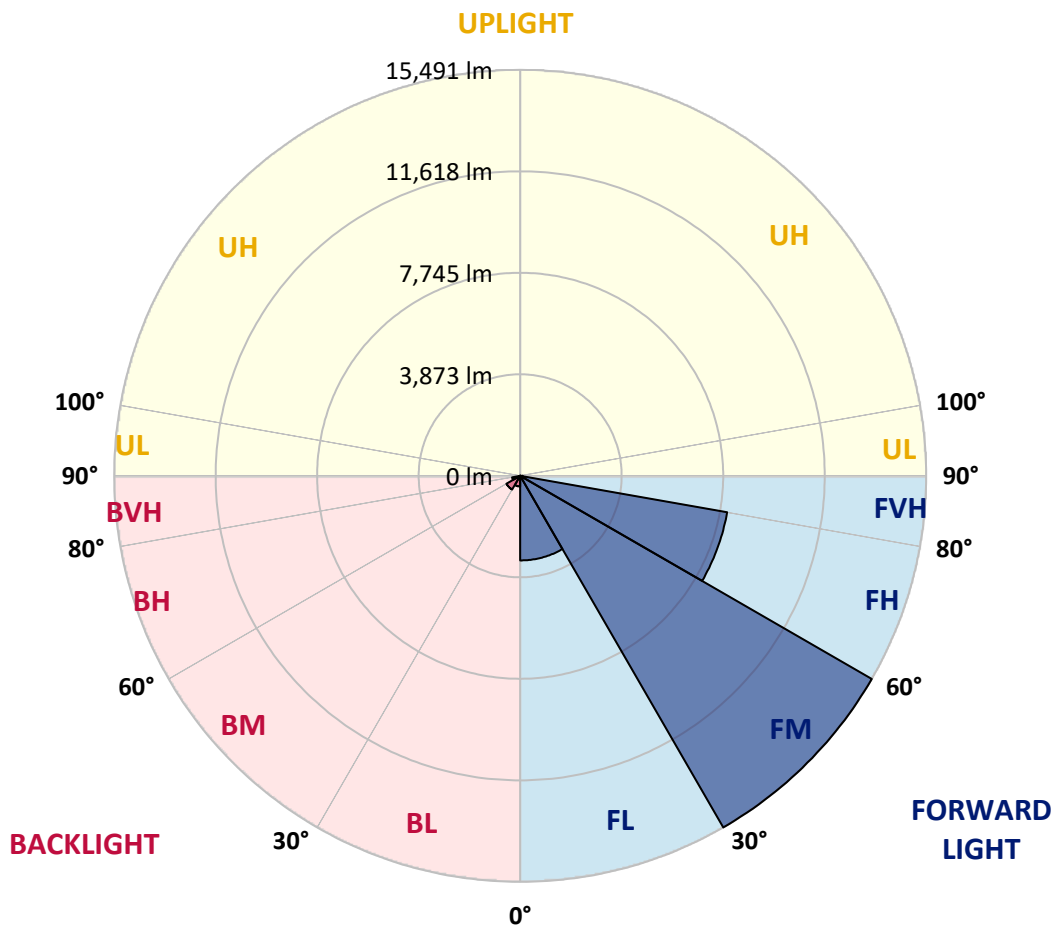


REPORT NUMBER: P400371  
 CATALOG NUMBER: ARCH-L-PA3-270-750-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3228.8	11.5			
FM (30°-60°)	15491.0	55.0			
FH (60°-80°)	8017.7	28.5			G4/12000
FVH (80°-90°)	99.1	0.4			G1/100
BL (0°-30°)	407.5	1.4	B1/500		
BM (30°-60°)	606.4	2.2	B1/1000		
BH (60°-80°)	312.8	1.1	B1/500		G1/500
BVH (80°-90°)	1.7	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-G4**  
 Type II Medium





REPORT NUMBER: P400371

CATALOG NUMBER: ARCH-L-PA3-270-750-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1
2.5°	5153.4	5125.2	5097.1	4989.2	4890.8	4801.7	4632.9	4412.5	4215.5	4173.3	3943.6
5°	6053.7	6020.9	5978.6	5870.8	5744.2	5594.1	5345.6	5008.0	4661.0	4586.0	4159.3
7.5°	6663.3	6635.1	6574.2	6522.6	6396.0	6250.6	5974.0	5580.1	5101.8	5008.0	4407.8
10°	7080.6	7061.8	7052.5	7010.3	6916.5	6799.2	6522.6	6109.9	5547.2	5439.4	4670.4
12.5°	7230.6	7230.6	7277.5	7347.9	7361.9	7324.4	7071.2	6658.6	6016.2	5903.6	4979.9
15°	7029.0	7052.5	7155.6	7380.7	7615.2	7769.9	7610.5	7226.0	6532.0	6410.1	5345.6
17.5°	6972.7	6996.2	7066.5	7263.5	7577.6	7990.3	8070.0	7774.6	7019.6	6916.5	5720.7
20°	7132.2	7155.6	7216.6	7385.4	7624.5	8041.9	8374.8	8304.5	7535.4	7427.6	6100.6
22.5°	7512.0	7526.1	7526.1	7657.4	7868.4	8177.9	8567.1	8806.2	8065.3	7948.1	6475.7
25°	8327.9	8299.8	8187.2	8121.6	8257.6	8510.8	8810.9	9247.0	8656.1	8496.7	6879.0
27.5°	9397.0	9490.8	9218.8	8904.7	8801.5	8946.9	9153.2	9636.2	9228.2	9059.4	7244.7
30°	10846.0	10808.5	10452.1	10001.9	9556.5	9504.9	9575.2	9969.1	9800.3	9640.9	7652.7
32.5°	12037.0	12107.4	11732.2	11183.6	10517.7	10203.6	10128.5	10367.7	10409.9	10306.7	8135.7
35°	13260.9	13335.9	12970.2	12360.6	11568.1	11042.9	10827.2	10860.0	11164.8	11033.5	8642.1
37.5°	14358.1	14423.8	14062.7	13439.1	12646.6	12004.2	11694.7	11441.5	11896.3	11779.1	9176.6
40°	15192.8	15202.2	14958.3	14400.3	13650.1	12984.2	12632.5	12135.5	12670.0	12590.3	9734.6
42.5°	15783.6	15802.4	15624.2	15145.9	14451.9	13833.0	13546.9	12956.1	13561.0	13490.6	10381.7
45°	16060.3	16093.1	16074.4	15633.6	15056.8	14522.3	14428.5	13828.3	14536.3	14470.7	11127.3
47.5°	15797.7	15797.7	16036.8	15975.9	15446.0	15089.6	15197.5	14738.0	15596.1	15535.1	11887.0
50°	14705.1	14719.2	15206.9	15905.6	15596.1	15516.4	15854.0	15628.9	16557.3	16594.9	12796.7
52.5°	11835.4	11811.9	13457.8	14798.9	15492.9	15708.6	16458.9	16538.6	17710.9	17823.4	13701.7
55°	8843.7	8829.6	10405.2	12838.9	14770.8	15610.1	16796.5	17349.8	18695.6	18765.9	14376.9
57.5°	7000.9	6963.4	7830.9	10348.9	13139.0	15169.4	16810.6	17504.5	19244.2	19366.1	15033.4
60°	5383.1	5350.3	5997.4	7699.6	10827.2	13997.1	16407.3	17513.9	19774.1	19989.8	15914.9
62.5°	3849.8	3887.3	4384.3	5523.8	8327.9	12341.8	15882.1	17645.2	20716.6	20960.4	17166.9
65°	2597.8	2579.0	2991.7	3760.7	5922.4	10114.5	15075.6	17921.9	22414.1	22840.8	18667.5
67.5°	1805.3	1819.4	2007.0	2447.7	3760.7	7765.2	13734.5	18076.6	24167.8	24500.7	19717.8
70°	1303.6	1322.3	1425.5	1645.9	2297.7	5265.9	11610.3	17368.6	24641.4	24932.1	18986.3
72.5°	858.1	895.6	1050.4	1167.6	1467.7	3296.5	8553.0	14963.0	22601.6	22817.3	15929.0
75°	464.2	473.6	675.2	872.2	1045.7	2053.8	5101.8	10091.0	16909.0	16838.7	10503.7
77.5°	361.1	375.1	417.3	623.7	703.4	1130.1	2016.3	4557.8	8009.0	7793.3	3582.5
80°	220.4	229.8	290.7	370.4	492.4	656.5	590.8	1237.9	1627.1	1524.0	525.2
82.5°	131.3	140.7	173.5	309.5	389.2	309.5	206.3	300.1	304.8	300.1	131.3
85°	23.4	23.4	121.9	215.7	206.3	89.1	121.9	98.5	89.1	93.8	28.1
87.5°	0.0	0.0	46.9	65.6	93.8	32.8	46.9	23.4	23.4	23.4	14.1
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: P400371

CATALOG NUMBER: ARCH-L-PA3-270-750-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1	3770.1
2.5°	3802.9	3643.5	3315.2	3029.2	2743.1	2532.1	2372.7	2208.6	2152.3	2082.0	2044.5
5°	3868.5	3554.4	2902.6	2382.1	1941.3	1603.7	1388.0	1256.7	1172.3	1111.3	1097.3
7.5°	3967.0	3484.0	2569.6	1866.3	1383.3	1045.7	867.5	778.4	731.5	703.4	694.0
10°	4084.2	3423.1	2241.4	1453.6	975.3	736.2	637.7	600.2	581.5	572.1	567.4
12.5°	4248.4	3399.6	1964.7	1120.7	736.2	604.9	553.3	529.9	515.8	501.7	497.0
15°	4464.1	3409.0	1711.5	867.5	609.6	539.3	497.0	473.6	454.8	440.8	440.8
17.5°	4689.1	3423.1	1463.0	703.4	553.3	492.4	445.5	412.6	398.6	384.5	379.8
20°	4900.1	3418.4	1223.9	600.2	501.7	440.8	393.9	361.1	337.6	323.6	323.6
22.5°	5101.8	3390.2	998.8	539.3	459.5	389.2	337.6	304.8	286.0	272.0	272.0
25°	5317.5	3334.0	815.9	492.4	408.0	342.3	290.7	257.9	243.8	229.8	229.8
27.5°	5486.3	3240.2	665.9	450.2	361.1	295.4	248.5	220.4	206.3	196.9	196.9
30°	5669.2	3104.2	553.3	403.3	314.2	253.2	211.0	187.6	173.5	168.8	168.8
32.5°	5870.8	2954.2	473.6	356.4	267.3	215.7	178.2	164.1	150.1	145.4	145.4
35°	6105.3	2822.9	426.7	309.5	234.5	182.9	154.7	140.7	131.3	131.3	131.3
37.5°	6372.5	2686.9	384.5	272.0	201.6	154.7	131.3	126.6	121.9	117.2	117.2
40°	6663.3	2541.5	347.0	239.1	173.5	131.3	112.5	112.5	107.9	107.9	107.9
42.5°	6991.5	2414.9	314.2	211.0	150.1	112.5	98.5	98.5	93.8	93.8	93.8
45°	7347.9	2297.7	286.0	187.6	131.3	98.5	89.1	84.4	79.7	79.7	79.7
47.5°	7769.9	2232.0	262.6	164.1	112.5	84.4	75.0	70.3	65.6	61.0	61.0
50°	8309.2	2260.2	239.1	136.0	98.5	70.3	61.0	56.3	51.6	46.9	46.9
52.5°	8735.9	2246.1	206.3	117.2	79.7	56.3	46.9	42.2	37.5	32.8	32.8
55°	9045.3	2189.8	178.2	98.5	61.0	46.9	37.5	28.1	23.4	23.4	23.4
57.5°	9350.1	2133.6	150.1	79.7	46.9	32.8	23.4	18.8	18.8	18.8	18.8
60°	9823.7	2053.8	131.3	65.6	37.5	23.4	14.1	14.1	9.4	9.4	9.4
62.5°	10400.5	1955.4	107.9	56.3	28.1	18.8	9.4	9.4	0.0	0.0	0.0
65°	11033.5	1781.9	89.1	42.2	23.4	14.1	9.4	0.0	0.0	0.0	0.0
67.5°	10888.2	1430.2	75.0	28.1	18.8	9.4	4.7	0.0	0.0	0.0	0.0
70°	9631.5	966.0	61.0	23.4	14.1	9.4	4.7	0.0	0.0	0.0	0.0
72.5°	7544.8	572.1	42.2	18.8	9.4	4.7	0.0	0.0	0.0	0.0	0.0
75°	4829.8	286.0	28.1	14.1	9.4	4.7	0.0	0.0	0.0	0.0	0.0
77.5°	1617.8	140.7	18.8	9.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	229.8	46.9	9.4	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	51.6	18.8	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.8	9.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.4	4.7	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)