

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: P399752

Luminaire Tested: **ARCH-L-PA3-180-830-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399752  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-180-830-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14685 lumens  
Efficiency: N/A  
Efficacy: 81.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

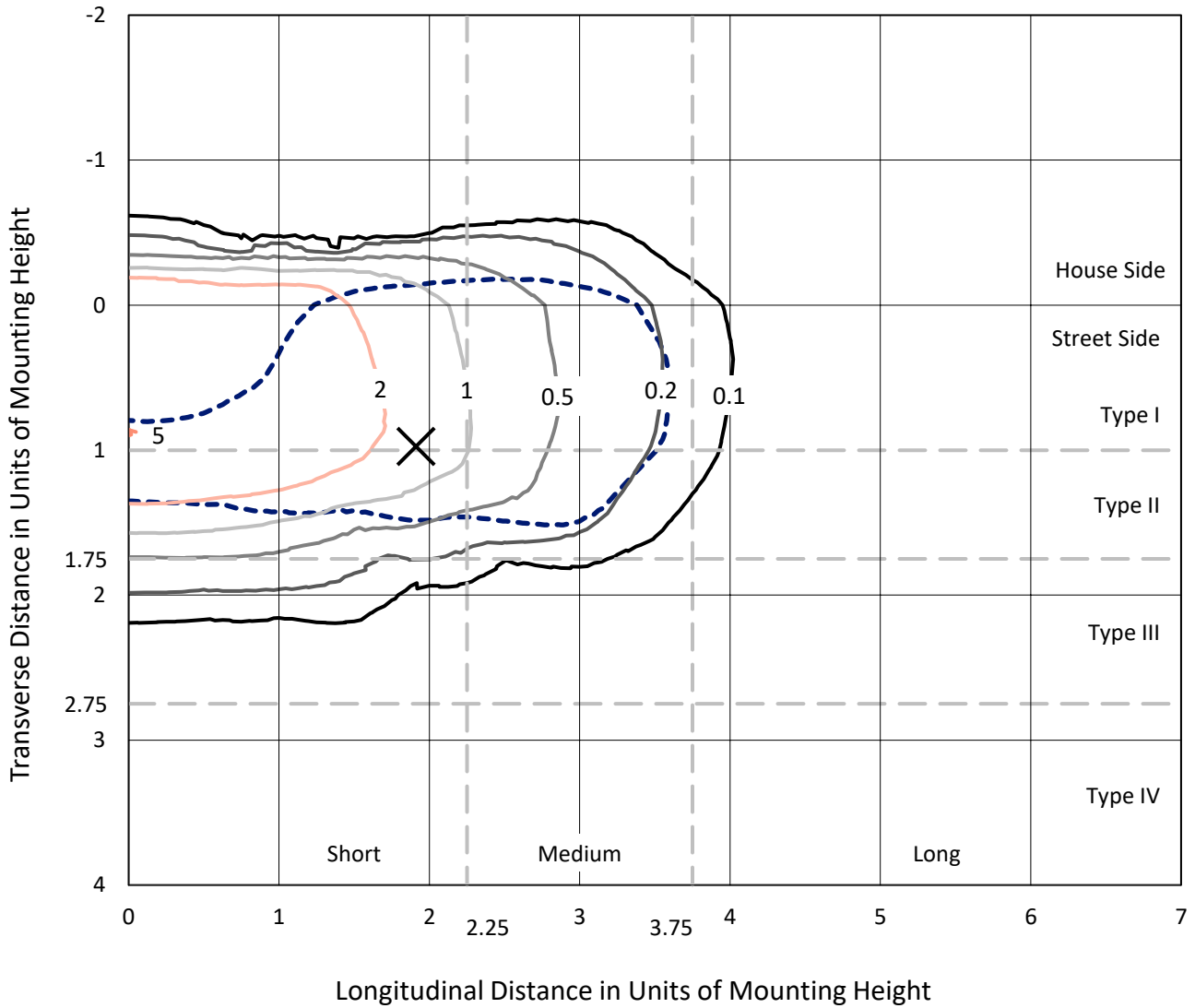
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

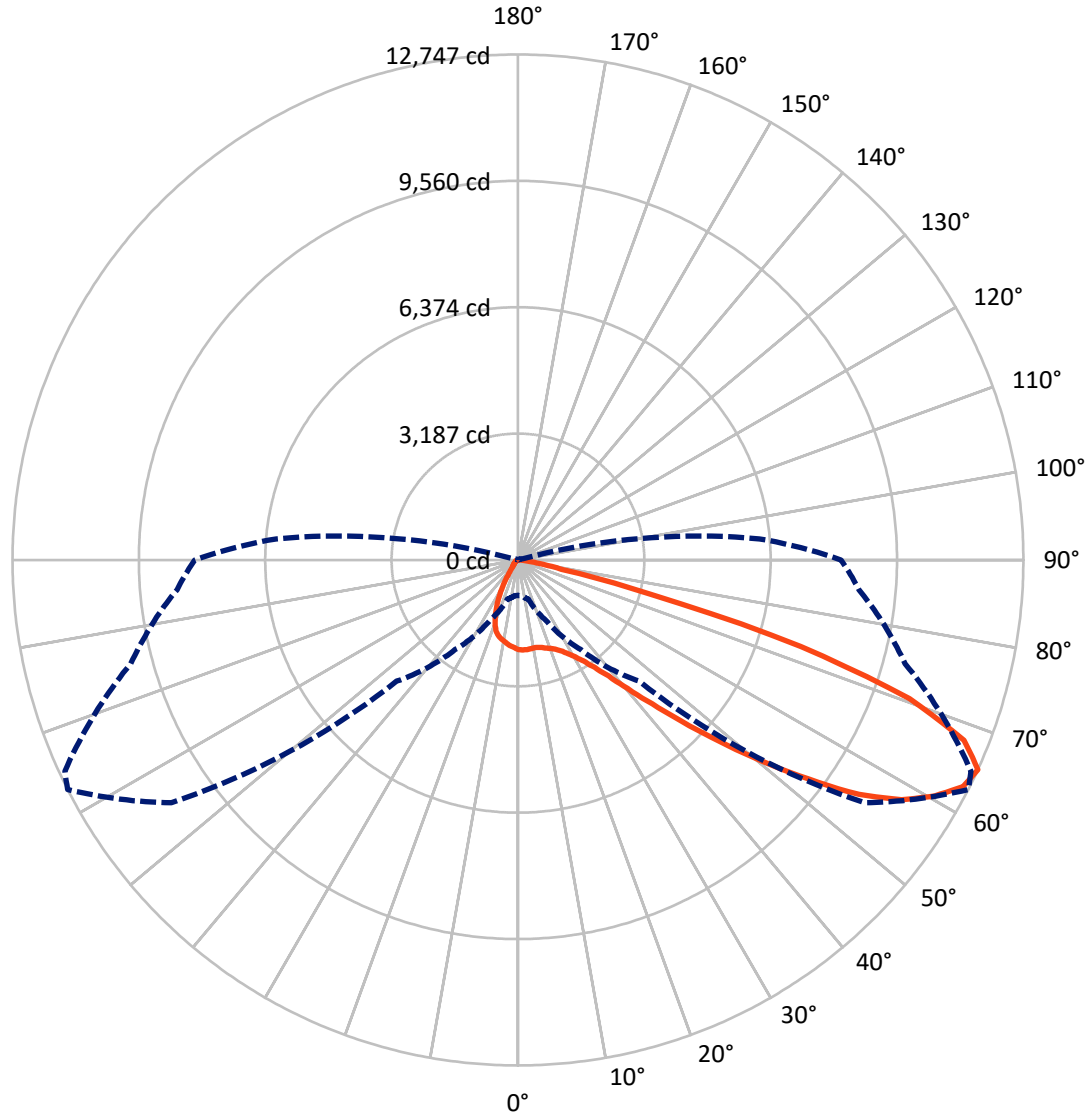
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1889.9	0.0	1889.9
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	12795.1	0.0	12795.1
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	14685.0	0.0	14685.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.4	1.4
10°-20°	509.2	3.5
20°-30°	754.8	5.1
30°-40°	1401.4	9.5
40°-50°	2968.8	20.2
50°-60°	4105.1	28.0
60°-70°	3286.3	22.4
70°-80°	1365.4	9.3
80°-90°	87.7	0.6
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°	14685.0	100.0
0°-180°	14685.0	100.0

**Coefficient of Utilization**



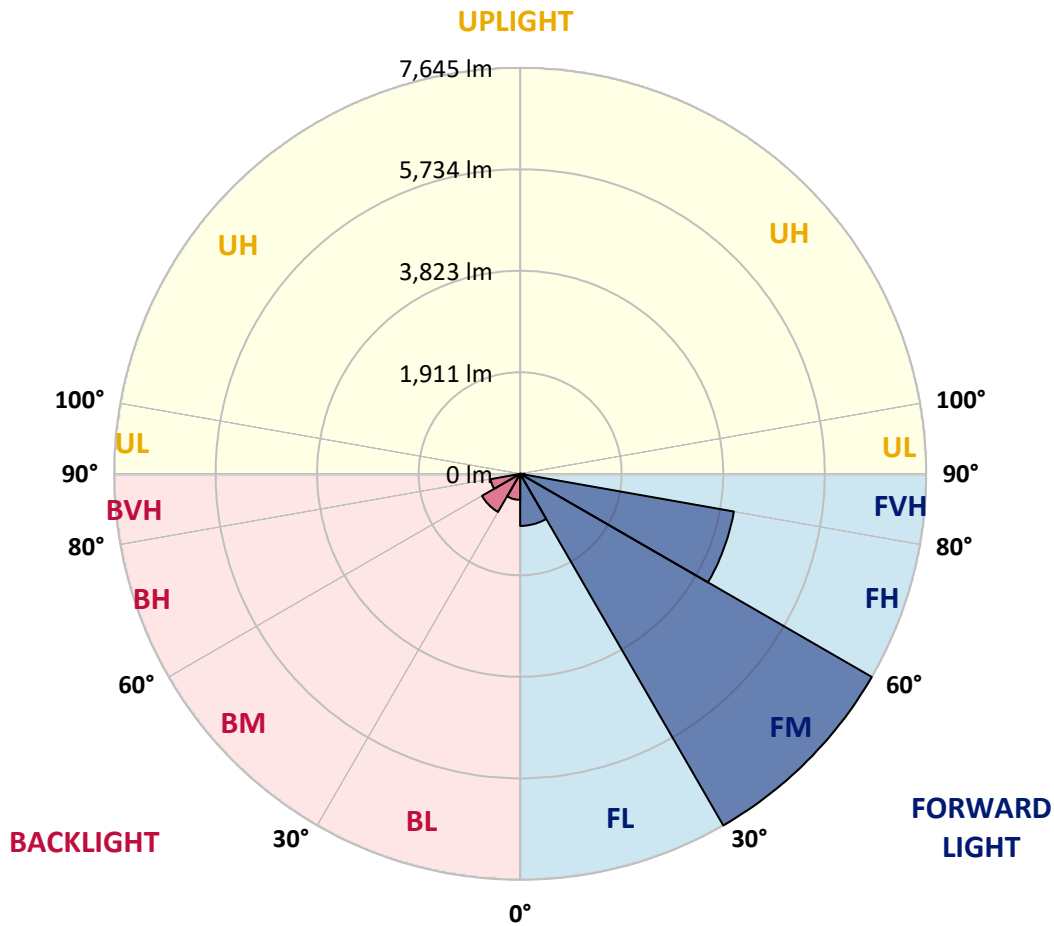
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	980.6	6.7			
FM (30°-60°)	7645.1	52.1			
FH (60°-80°)	4085.7	27.8			G2/5000
FVH (80°-90°)	83.7	0.6			G1/100
BL (0°-30°)	489.8	3.3	B1/500		
BM (30°-60°)	830.2	5.7	B1/1000		
BH (60°-80°)	565.9	3.9	B2/1000		G2/1000
BVH (80°-90°)	4.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2
2.5°	2301.0	2295.5	2290.0	2287.2	2287.2	2284.4	2273.3	2270.5	2265.0	2259.5	2253.9
5°	2278.9	2270.5	2267.8	2270.5	2273.3	2278.9	2273.3	2273.3	2267.8	2262.2	2251.1
7.5°	2223.4	2217.9	2220.6	2229.0	2231.7	2251.1	2253.9	2262.2	2262.2	2256.7	2248.4
10°	2156.9	2154.1	2154.1	2168.0	2181.8	2209.6	2229.0	2251.1	2253.9	2253.9	2240.1
12.5°	2107.0	2104.2	2112.5	2129.2	2156.9	2192.9	2226.2	2259.5	2265.0	2267.8	2245.6
15°	2076.5	2076.5	2087.6	2120.8	2159.7	2209.6	2248.4	2292.7	2298.3	2295.5	2265.0
17.5°	2048.8	2051.5	2073.7	2129.2	2173.5	2240.1	2287.2	2337.1	2339.9	2337.1	2287.2
20°	2037.7	2043.2	2076.5	2148.6	2198.5	2273.3	2334.3	2384.2	2387.0	2375.9	2309.4
22.5°	2068.2	2070.9	2112.5	2190.2	2237.3	2320.5	2398.1	2445.2	2448.0	2431.3	2342.6
25°	2173.5	2173.5	2209.6	2276.1	2317.7	2400.8	2484.0	2539.5	2539.5	2520.1	2417.5
27.5°	2420.3	2398.1	2389.8	2409.2	2423.0	2511.7	2600.5	2669.8	2667.0	2639.3	2514.5
30°	2897.1	2841.7	2752.9	2653.1	2603.2	2664.2	2747.4	2836.1	2833.3	2789.0	2633.7
32.5°	3698.3	3617.9	3407.2	3143.8	2930.4	2861.1	2938.7	3035.7	3038.5	2985.8	2825.0
35°	4821.1	4693.6	4316.5	3950.6	3462.7	3199.3	3221.5	3326.8	3360.1	3332.4	3146.6
37.5°	5902.3	5785.9	5425.5	4918.1	4255.5	3717.7	3623.5	3714.9	3753.8	3753.8	3556.9
40°	6991.8	6856.0	6537.2	6027.1	5328.4	4527.2	4189.0	4263.9	4305.4	4313.8	4055.9
42.5°	7865.1	7776.4	7532.5	7136.0	6481.7	5946.7	5004.1	4962.5	5001.3	4970.8	4635.4
45°	8469.5	8400.2	8231.1	8081.4	7762.6	7493.6	6093.6	5813.6	5838.6	5733.2	5286.9
47.5°	8594.3	8516.6	8480.6	8688.5	8915.9	8982.4	7432.7	6825.5	6800.6	6567.7	5963.3
50°	8050.9	8059.2	8192.3	8785.6	9733.7	10332.5	8985.2	7967.7	7876.2	7357.8	6592.6
52.5°	6878.2	7011.3	7346.7	8308.7	9983.2	11313.9	10537.7	9179.2	9037.8	8125.7	7063.9
55°	5381.1	5553.0	6104.7	7210.9	9462.0	11752.0	11846.2	10437.9	10116.3	8702.4	7429.9
57.5°	4000.5	4053.2	4696.3	5705.5	8228.3	11322.3	12517.1	11408.2	10995.1	9162.6	7793.1
60°	2492.3	2525.6	3204.8	4344.3	6232.2	9733.7	12517.1	12076.3	11682.7	9575.7	8125.7
62.5°	1549.7	1560.8	1815.9	2977.5	4236.1	7219.2	11998.7	12594.8	12278.7	9872.3	8411.3
65°	892.7	903.8	1023.0	1682.8	2755.7	4322.1	10673.5	12747.2	12605.8	10108.0	8633.1
67.5°	651.5	657.0	704.2	945.4	1802.0	2220.6	8017.6	12134.5	12312.0	10224.4	8627.5
70°	565.6	573.9	634.9	737.4	1300.2	1364.0	4080.9	10479.5	10975.7	10058.1	8369.7
72.5°	435.3	446.3	537.8	693.1	953.7	981.4	1477.7	7457.6	8208.9	9018.4	7662.8
75°	299.4	310.5	402.0	571.1	787.3	734.7	812.3	3432.2	4330.4	6049.3	5833.0
77.5°	191.3	194.1	252.3	415.9	679.2	521.2	557.2	1120.0	1571.9	2736.3	2752.9
80°	127.5	130.3	155.3	268.9	465.8	482.4	343.8	518.4	568.3	798.4	554.5
82.5°	77.6	77.6	105.3	169.1	282.8	399.2	224.6	271.7	291.1	307.7	144.2
85°	30.5	30.5	63.8	110.9	177.4	185.7	141.4	158.0	166.3	180.2	66.5
87.5°	8.3	8.3	36.0	61.0	77.6	85.9	85.9	77.6	83.2	102.6	33.3
90°	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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2	2262.2
2.5°	2251.1	2242.8	2231.7	2220.6	2209.6	2201.2	2192.9	2192.9	2187.4	2179.1	2173.5
5°	2245.6	2231.7	2206.8	2187.4	2156.9	2134.7	2118.1	2104.2	2095.9	2076.5	2073.7
7.5°	2237.3	2220.6	2184.6	2145.8	2095.9	2057.1	2018.3	1990.5	1962.8	1940.6	1935.1
10°	2223.4	2204.0	2151.3	2095.9	2026.6	1954.5	1863.0	1757.7	1660.6	1605.2	1588.6
12.5°	2223.4	2198.5	2129.2	2054.3	1954.5	1777.1	1544.2	1311.3	1131.1	1050.7	1028.5
15°	2237.3	2204.0	2112.5	2009.9	1824.2	1463.8	1086.8	779.0	582.2	521.2	507.3
17.5°	2251.1	2204.0	2087.6	1949.0	1585.8	1061.8	618.2	410.3	346.5	332.7	332.7
20°	2256.7	2198.5	2054.3	1835.3	1267.0	659.8	368.7	307.7	282.8	274.5	274.5
22.5°	2278.9	2201.2	2029.4	1671.7	920.4	388.1	291.1	257.8	232.9	224.6	224.6
25°	2334.3	2234.5	2034.9	1463.8	590.5	293.9	246.7	213.5	188.5	177.4	177.4
27.5°	2423.0	2309.4	2065.4	1222.6	371.5	252.3	207.9	171.9	152.5	141.4	141.4
30°	2522.8	2392.5	2079.3	945.4	277.2	213.5	169.1	135.8	122.0	113.7	110.9
32.5°	2697.5	2536.7	2068.2	648.7	227.3	180.2	135.8	108.1	97.0	94.3	94.3
35°	2977.5	2789.0	2046.0	407.5	188.5	144.2	108.1	88.7	80.4	77.6	74.9
37.5°	3357.3	3157.7	1979.5	268.9	155.3	113.7	88.7	74.9	66.5	63.8	63.8
40°	3820.3	3579.1	1851.9	205.2	133.1	91.5	74.9	63.8	58.2	55.4	55.4
42.5°	4349.8	4047.6	1649.5	177.4	110.9	77.6	63.8	52.7	49.9	47.1	47.1
45°	4929.2	4538.3	1369.5	158.0	94.3	63.8	52.7	47.1	41.6	41.6	38.8
47.5°	5544.7	5031.8	1053.5	138.6	80.4	55.4	47.1	38.8	36.0	33.3	33.3
50°	6138.0	5472.6	740.2	119.2	66.5	47.1	38.8	33.3	30.5	27.7	27.7
52.5°	6556.6	5738.8	524.0	102.6	55.4	41.6	30.5	25.0	22.2	22.2	22.2
55°	6892.0	5905.1	365.9	85.9	47.1	36.0	25.0	19.4	19.4	16.6	16.6
57.5°	7208.1	6013.2	268.9	72.1	38.8	27.7	19.4	13.9	13.9	11.1	11.1
60°	7535.2	6071.4	205.2	58.2	33.3	22.2	13.9	11.1	8.3	8.3	8.3
62.5°	7865.1	6107.5	158.0	47.1	27.7	16.6	11.1	8.3	5.5	2.8	2.8
65°	8153.5	6118.6	122.0	36.0	22.2	11.1	8.3	2.8	0.0	0.0	0.0
67.5°	8239.4	5991.0	94.3	27.7	16.6	8.3	5.5	0.0	0.0	0.0	0.0
70°	8006.5	5652.8	72.1	22.2	13.9	5.5	2.8	0.0	0.0	0.0	0.0
72.5°	7105.5	4740.7	55.4	13.9	11.1	5.5	2.8	0.0	0.0	0.0	0.0
75°	5084.5	2528.4	38.8	11.1	8.3	2.8	0.0	0.0	0.0	0.0	0.0
77.5°	2339.9	978.6	27.7	8.3	5.5	2.8	0.0	0.0	0.0	0.0	0.0
80°	457.4	244.0	11.1	5.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	105.3	41.6	5.5	5.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	36.0	13.9	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.9	5.5	2.8	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)