

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: P400002

Luminaire Tested: **ARCH-L-PA3-220-740-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400002
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-PA3-220-740-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 945mA 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: 24702 lumens
Efficiency: N/A
Efficacy: 111.3 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

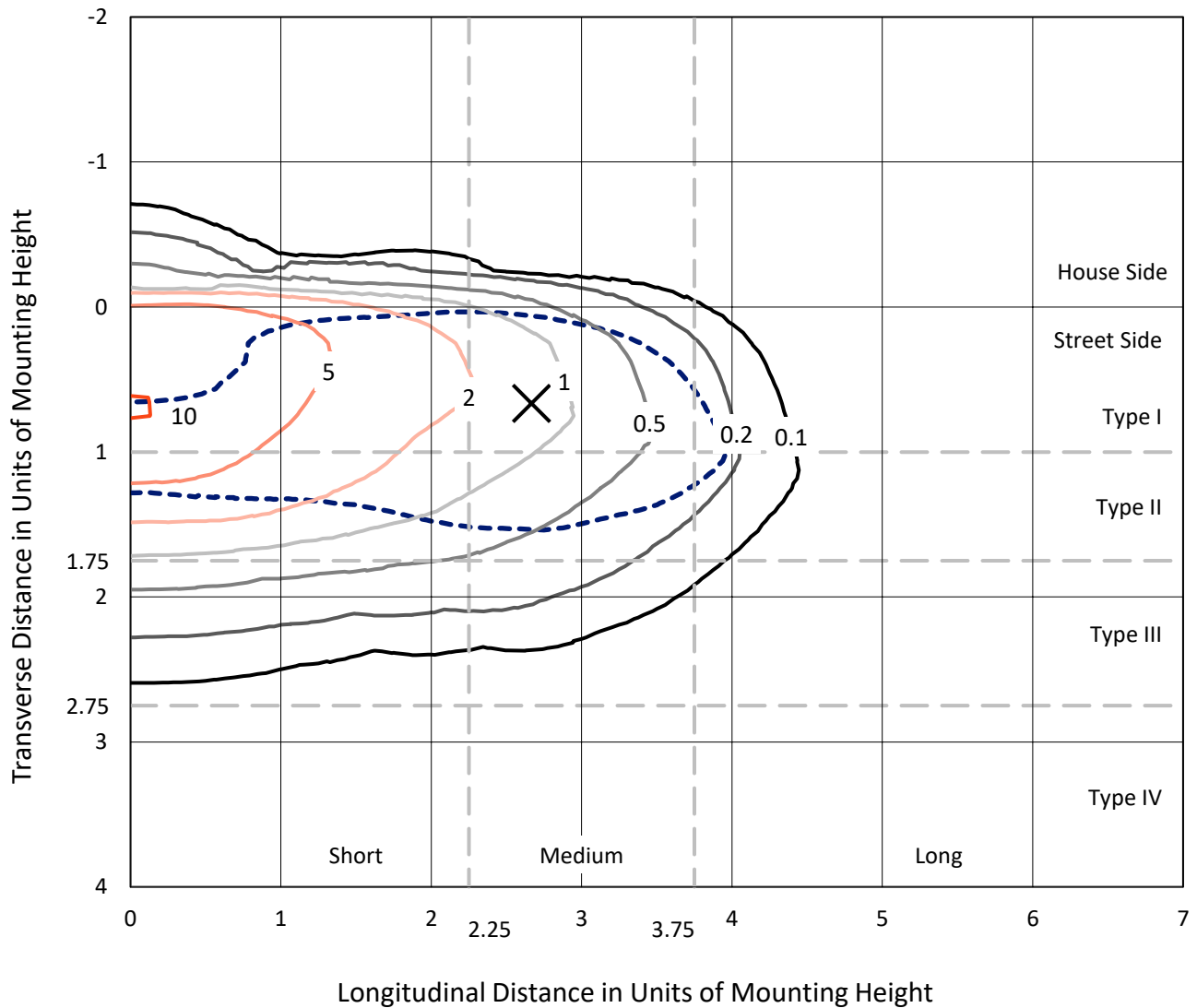
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P400002
 CATALOG NUMBER: ARCH-L-PA3-220-740-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

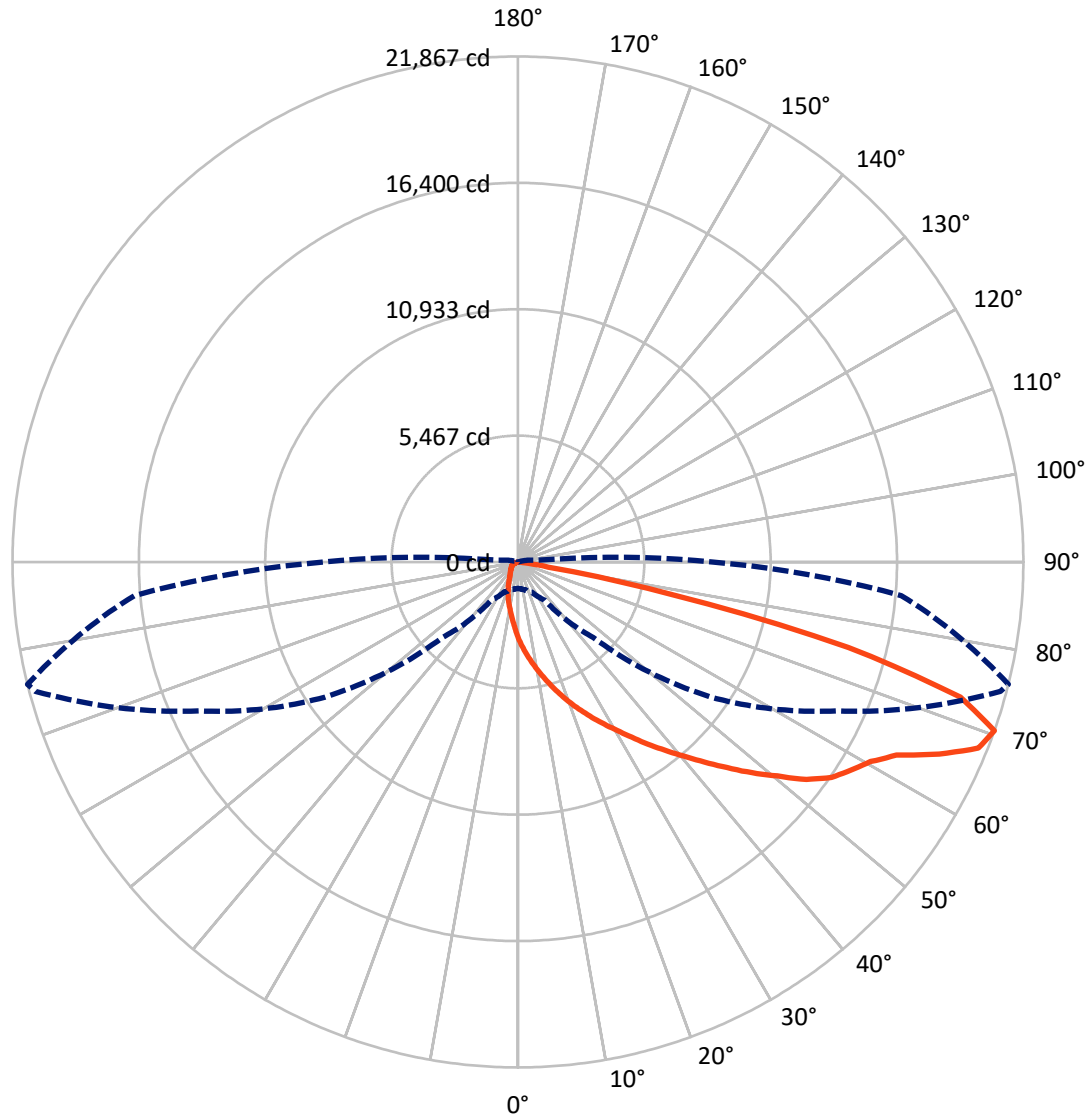
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc
 Type II - Medium - N/A

REPORT NUMBER: P400002
CATALOG NUMBER: ARCH-L-PA3-220-740-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P400002
 CATALOG NUMBER: ARCH-L-PA3-220-740-U-T2R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1165.0	0.0	1165.0
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	23537.0	0.0	23537.0
	% Fixture	95.3	0.0	95.3
Total	Lumens	24702.0	0.0	24702.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.5	1.3
10°-20°	1005.4	4.1
20°-30°	1872.3	7.6
30°-40°	3311.8	13.4
40°-50°	5064.5	20.5
50°-60°	5741.9	23.2
60°-70°	4922.2	19.9
70°-80°	2384.0	9.7
80°-90°	88.4	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°	24702.0	100.0
0°-180°	24702.0	100.0

Coefficient of Utilization

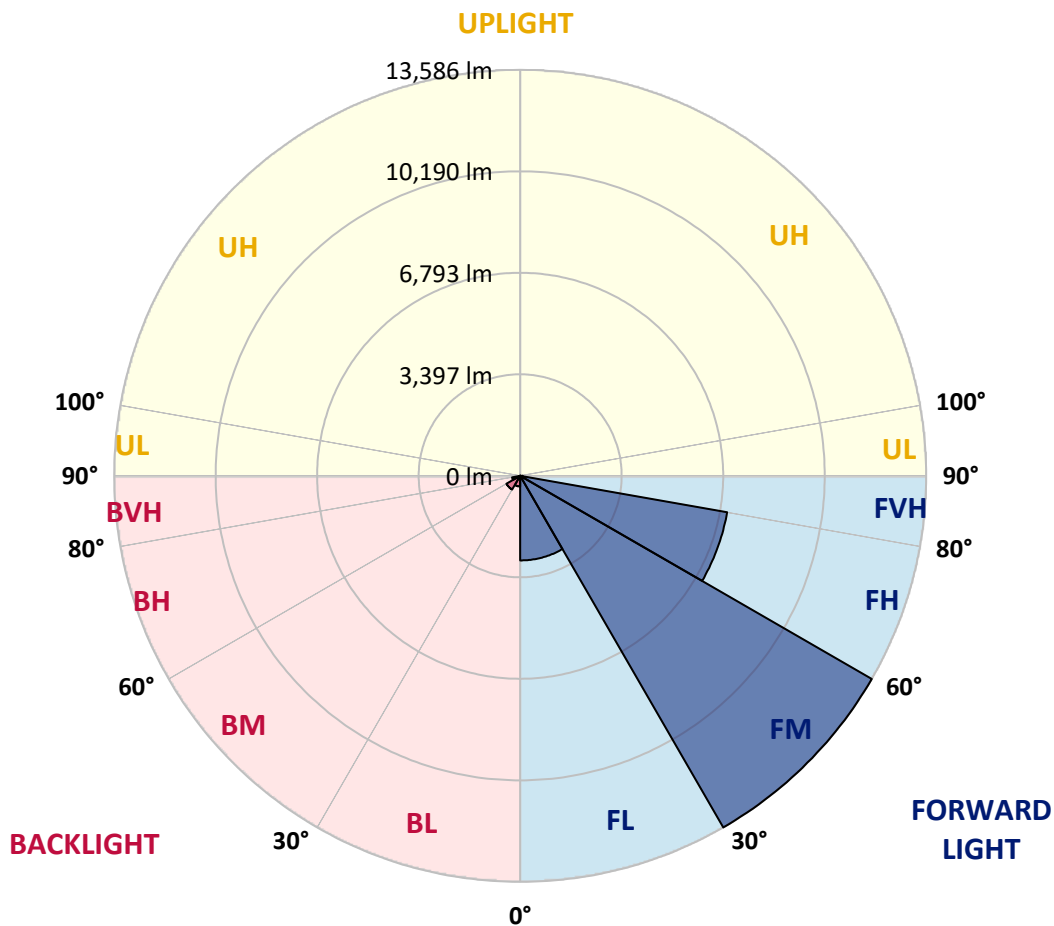


REPORT NUMBER: P400002
 CATALOG NUMBER: ARCH-L-PA3-220-740-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2831.8	11.5			
FM (30°-60°)	13586.3	55.0			
FH (60°-80°)	7031.9	28.5			G3/7500
FVH (80°-90°)	86.9	0.4			G1/100
BL (0°-30°)	357.4	1.4	B1/500		
BM (30°-60°)	531.8	2.2	B1/1000		
BH (60°-80°)	274.3	1.1	B1/500		G1/500
BVH (80°-90°)	1.5	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: P400002

CATALOG NUMBER: ARCH-L-PA3-220-740-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5
2.5°	4519.7	4495.1	4470.4	4375.8	4289.4	4211.3	4063.2	3869.9	3697.2	3660.2	3458.7
5°	5309.4	5280.6	5243.6	5149.0	5037.9	4906.3	4688.4	4392.2	4087.9	4022.1	3647.9
7.5°	5844.0	5819.3	5765.8	5720.6	5609.6	5482.1	5239.4	4894.0	4474.5	4392.2	3865.8
10°	6210.0	6193.6	6185.3	6148.3	6066.1	5963.3	5720.6	5358.7	4865.2	4770.6	4096.1
12.5°	6341.6	6341.6	6382.7	6444.4	6456.8	6423.9	6201.8	5839.9	5276.5	5177.7	4367.6
15°	6164.8	6185.3	6275.8	6473.2	6678.8	6814.6	6674.7	6337.5	5728.8	5621.9	4688.4
17.5°	6115.4	6136.0	6197.7	6370.4	6645.9	7007.9	7077.8	6818.7	6156.5	6066.1	5017.4
20°	6255.2	6275.8	6329.3	6477.3	6687.1	7053.1	7345.1	7283.4	6608.9	6514.3	5350.5
22.5°	6588.4	6600.7	6600.7	6715.9	6900.9	7172.4	7513.7	7723.4	7073.7	6970.8	5679.5
25°	7304.0	7279.3	7180.6	7123.0	7242.3	7464.3	7727.6	8110.0	7591.8	7452.0	6033.2
27.5°	8241.6	8323.9	8085.3	7809.8	7719.3	7846.8	8027.8	8451.4	8093.6	7945.5	6353.9
30°	9512.4	9479.5	9167.0	8772.2	8381.5	8336.2	8397.9	8743.4	8595.3	8455.5	6711.7
32.5°	10557.0	10618.7	10289.7	9808.5	9224.5	8949.0	8883.2	9092.9	9129.9	9039.5	7135.3
35°	11630.4	11696.2	11375.4	10840.8	10145.8	9685.1	9496.0	9524.8	9792.1	9676.9	7579.5
37.5°	12592.7	12650.3	12333.7	11786.7	11091.7	10528.2	10256.8	10034.7	10433.6	10330.8	8048.3
40°	13324.8	13333.0	13119.2	12629.8	11971.7	11387.8	11079.3	10643.4	11112.2	11042.3	8537.7
42.5°	13843.0	13859.4	13703.1	13283.7	12675.0	12132.1	11881.3	11363.1	11893.6	11831.9	9105.3
45°	14085.6	14114.4	14098.0	13711.4	13205.5	12736.7	12654.4	12128.0	12749.0	12691.4	9759.2
47.5°	13855.3	13855.3	14065.1	14011.6	13546.9	13234.3	13328.9	12925.9	13678.5	13625.0	10425.4
50°	12897.1	12909.4	13337.1	13949.9	13678.5	13608.6	13904.7	13707.3	14521.6	14554.5	11223.3
52.5°	10380.2	10359.6	11803.1	12979.3	13588.0	13777.2	14435.2	14505.1	15533.2	15631.9	12017.0
55°	7756.3	7744.0	9125.8	11260.3	12954.7	13690.8	14731.3	15216.6	16396.9	16458.6	12609.2
57.5°	6140.1	6107.2	6868.0	9076.5	11523.5	13304.2	14743.6	15352.3	16878.1	16985.0	13185.0
60°	4721.3	4692.5	5260.0	6752.9	9496.0	12276.1	14389.9	15360.5	17342.8	17532.0	13958.1
62.5°	3376.4	3409.3	3845.3	4844.6	7304.0	10824.3	13929.3	15475.7	18169.4	18383.3	15056.2
65°	2278.4	2261.9	2623.8	3298.3	5194.2	8870.9	13222.0	15718.3	19658.2	20032.4	16372.2
67.5°	1583.3	1595.7	1760.2	2146.8	3298.3	6810.4	12045.8	15854.0	21196.3	21488.3	17293.4
70°	1143.3	1159.8	1250.2	1443.5	2015.2	4618.4	10182.8	15233.0	21611.7	21866.6	16651.9
72.5°	752.6	785.5	921.2	1024.0	1287.2	2891.1	7501.4	13123.3	19822.7	20011.9	13970.5
75°	407.1	415.4	592.2	764.9	917.1	1801.3	4474.5	8850.3	14830.0	14768.3	9212.2
77.5°	316.7	329.0	366.0	547.0	616.9	991.1	1768.4	3997.4	7024.3	6835.1	3142.0
80°	193.3	201.5	255.0	324.9	431.8	575.8	518.2	1085.7	1427.1	1336.6	460.6
82.5°	115.2	123.4	152.2	271.4	341.3	271.4	181.0	263.2	267.3	263.2	115.2
85°	20.6	20.6	106.9	189.2	181.0	78.1	106.9	86.4	78.1	82.3	24.7
87.5°	0.0	0.0	41.1	57.6	82.3	28.8	41.1	20.6	20.6	20.6	12.3
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: P400002

CATALOG NUMBER: ARCH-L-PA3-220-740-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5	3306.5
2.5°	3335.3	3195.5	2907.6	2656.7	2405.9	2220.8	2081.0	1937.0	1887.7	1826.0	1793.1
5°	3392.9	3117.3	2545.7	2089.2	1702.6	1406.5	1217.3	1102.2	1028.1	974.7	962.3
7.5°	3479.3	3055.7	2253.7	1636.8	1213.2	917.1	760.8	682.7	641.6	616.9	608.7
10°	3582.1	3002.2	1965.8	1274.9	855.4	645.7	559.3	526.4	510.0	501.7	497.6
12.5°	3726.0	2981.6	1723.2	982.9	645.7	530.5	485.3	464.7	452.4	440.0	435.9
15°	3915.2	2989.9	1501.1	760.8	534.6	472.9	435.9	415.4	398.9	386.6	386.6
17.5°	4112.6	3002.2	1283.1	616.9	485.3	431.8	390.7	361.9	349.6	337.2	333.1
20°	4297.7	2998.1	1073.4	526.4	440.0	386.6	345.5	316.7	296.1	283.8	283.8
22.5°	4474.5	2973.4	876.0	472.9	403.0	341.3	296.1	267.3	250.9	238.5	238.5
25°	4663.7	2924.1	715.6	431.8	357.8	300.2	255.0	226.2	213.9	201.5	201.5
27.5°	4811.7	2841.8	584.0	394.8	316.7	259.1	218.0	193.3	181.0	172.7	172.7
30°	4972.1	2722.5	485.3	353.7	275.5	222.1	185.1	164.5	152.2	148.1	148.1
32.5°	5149.0	2590.9	415.4	312.6	234.4	189.2	156.3	143.9	131.6	127.5	127.5
35°	5354.6	2475.8	374.2	271.4	205.6	160.4	135.7	123.4	115.2	115.2	115.2
37.5°	5589.0	2356.5	337.2	238.5	176.8	135.7	115.2	111.0	106.9	102.8	102.8
40°	5844.0	2229.0	304.3	209.7	152.2	115.2	98.7	98.7	94.6	94.6	94.6
42.5°	6131.9	2118.0	275.5	185.1	131.6	98.7	86.4	86.4	82.3	82.3	82.3
45°	6444.4	2015.2	250.9	164.5	115.2	86.4	78.1	74.0	69.9	69.9	69.9
47.5°	6814.6	1957.6	230.3	143.9	98.7	74.0	65.8	61.7	57.6	53.5	53.5
50°	7287.5	1982.3	209.7	119.3	86.4	61.7	53.5	49.4	45.2	41.1	41.1
52.5°	7661.8	1969.9	181.0	102.8	69.9	49.4	41.1	37.0	32.9	28.8	28.8
55°	7933.2	1920.6	156.3	86.4	53.5	41.1	32.9	24.7	20.6	20.6	20.6
57.5°	8200.5	1871.2	131.6	69.9	41.1	28.8	20.6	16.5	16.5	16.5	16.5
60°	8615.9	1801.3	115.2	57.6	32.9	20.6	12.3	12.3	8.2	8.2	8.2
62.5°	9121.7	1714.9	94.6	49.4	24.7	16.5	8.2	8.2	0.0	0.0	0.0
65°	9676.9	1562.8	78.1	37.0	20.6	12.3	8.2	0.0	0.0	0.0	0.0
67.5°	9549.4	1254.3	65.8	24.7	16.5	8.2	4.1	0.0	0.0	0.0	0.0
70°	8447.3	847.2	53.5	20.6	12.3	8.2	4.1	0.0	0.0	0.0	0.0
72.5°	6617.2	501.7	37.0	16.5	8.2	4.1	0.0	0.0	0.0	0.0	0.0
75°	4236.0	250.9	24.7	12.3	8.2	4.1	0.0	0.0	0.0	0.0	0.0
77.5°	1418.8	123.4	16.5	8.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	201.5	41.1	8.2	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	45.2	16.5	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.5	8.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.2	4.1	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)