

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: P323383

Luminaire Tested: **GAN-SA9D-830-U-SL2-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P323383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-21)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA9D-830-U-SL2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45656 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

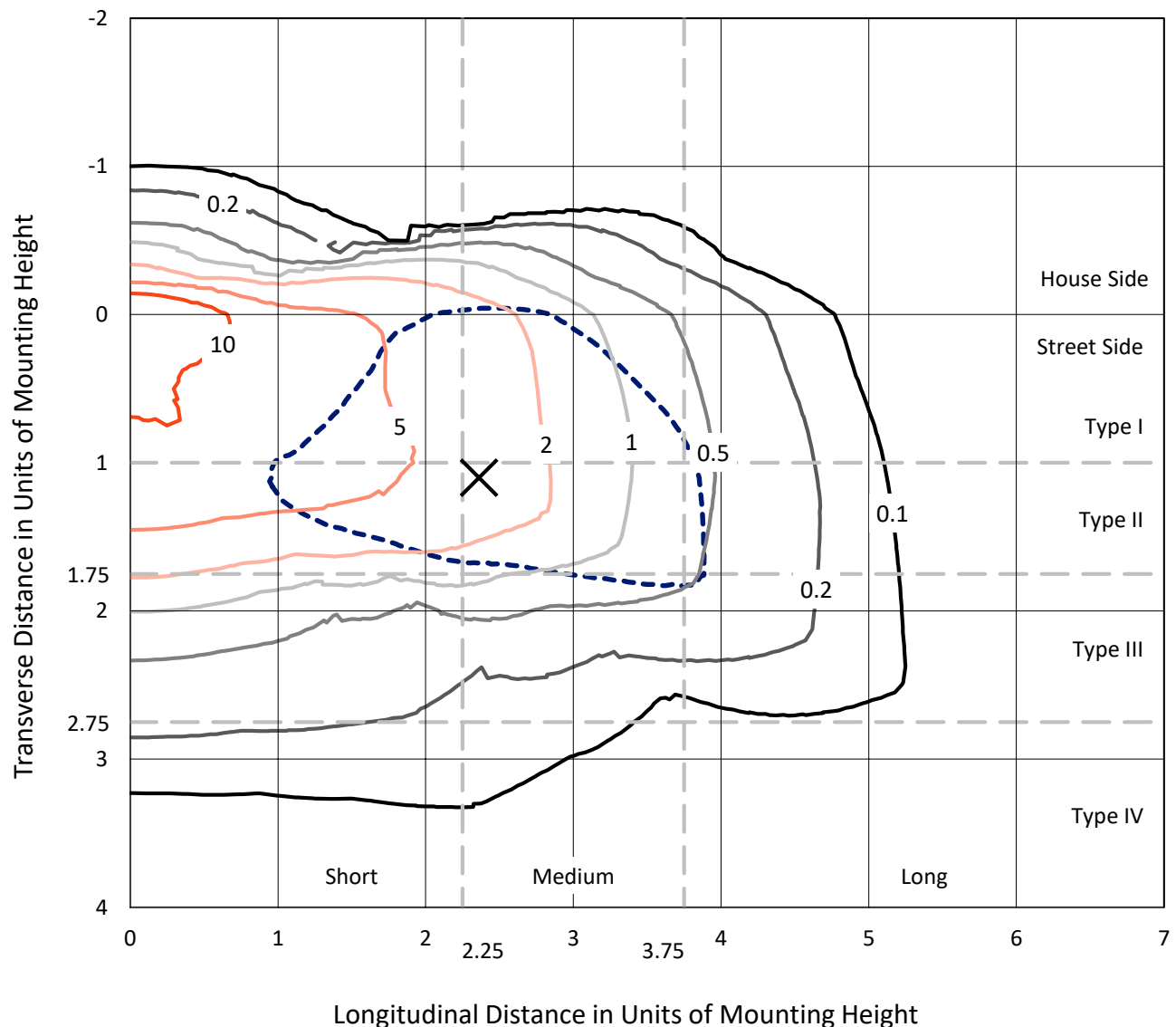
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

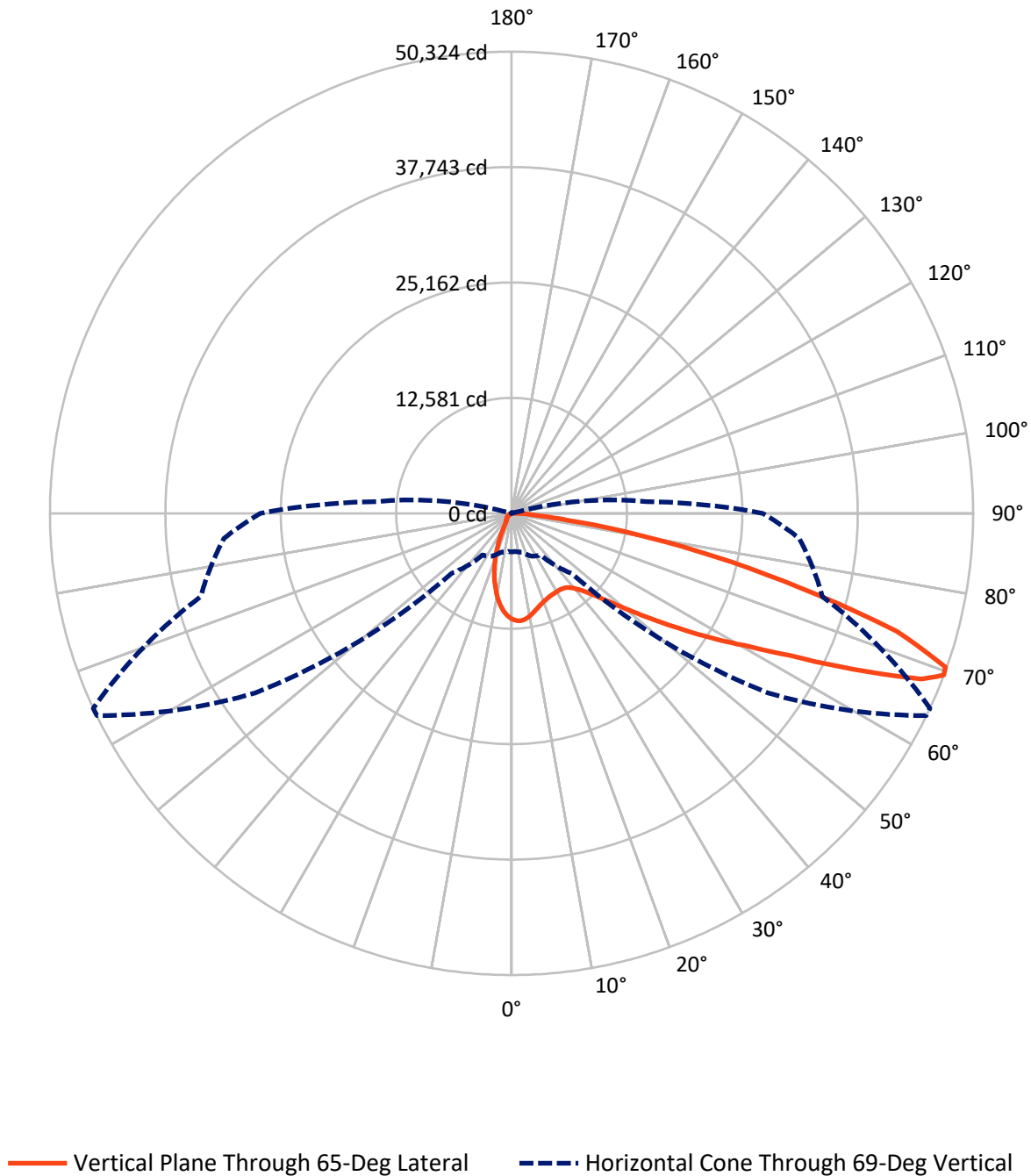
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5381.8	0.0	5381.8
	% Fixture	11.8	0.0	11.8
Street Side	Lumens	40274.2	0.0	40274.2
	% Fixture	88.2	0.0	88.2
Total	Lumens	45656.0	0.0	45656.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	964.8	2.1
10°-20°	2111.9	4.6
20°-30°	2925.1	6.4
30°-40°	4078.5	8.9
40°-50°	6339.3	13.9
50°-60°	10177.0	22.3
60°-70°	11511.9	25.2
70°-80°	6761.1	14.8
80°-90°	786.5	1.7
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°	45656.0	100.0
0°-180°	45656.0	100.0

Coefficient of Utilization



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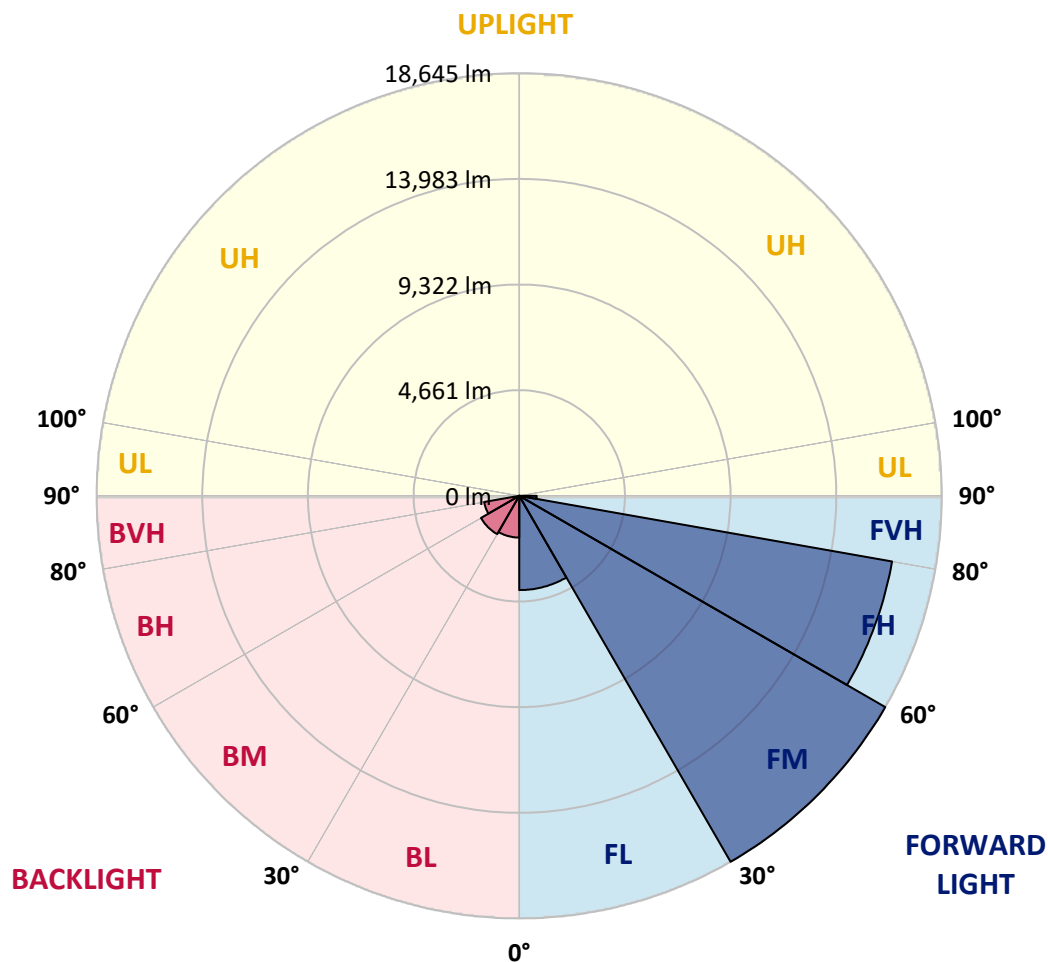
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4160.3	9.1			
FM	(30°-60°)	18644.6	40.8			
FH	(60°-80°)	16700.5	36.6			G5
FVH	(80°-90°)	768.8	1.7			G5
BL	(0°-30°)	1841.4	4.0	B3/2500		
BM	(30°-60°)	1950.2	4.3	B2/2500		
BH	(60°-80°)	1572.4	3.4	B3/2500		G3/2500
BVH	(80°-90°)	17.7	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4
2.5°	11639.7	11610.8	11633.9	11684.2	11709.3	11709.3	11728.6	11705.4	11713.2	11657.1	11576.0
5°	10911.4	10867.0	10930.7	11071.8	11245.6	11394.4	11614.6	11730.5	11742.1	11744.1	11649.4
7.5°	10127.1	10086.5	10181.2	10347.3	10571.4	10847.7	11232.1	11568.3	11587.6	11769.2	11699.6
10°	9489.5	9460.6	9570.7	9748.4	10011.1	10320.2	10791.6	11259.2	11315.2	11717.0	11691.9
12.5°	8983.4	8960.2	9064.5	9269.3	9537.8	9879.8	10372.4	10915.3	10990.6	11599.2	11653.3
15°	8614.4	8610.5	8697.4	8894.5	9192.0	9510.8	10015.0	10596.5	10683.4	11471.7	11647.5
17.5°	8421.2	8427.0	8490.7	8658.8	8913.8	9230.7	9713.6	10328.0	10422.6	11357.7	11676.4
20°	8401.9	8407.7	8442.4	8537.1	8743.8	9023.9	9468.3	10101.9	10200.5	11272.7	11722.8
22.5°	8571.9	8568.0	8577.7	8568.0	8683.9	8896.4	9306.0	9928.1	10042.1	11216.7	11759.5
25°	8898.4	8892.6	8888.7	8817.2	8739.9	8853.9	9238.4	9829.5	9937.7	11176.1	11780.8
27.5°	9352.4	9348.5	9342.7	9224.9	8993.0	8921.5	9246.1	9792.8	9883.6	11143.2	11776.9
30°	9949.3	9976.4	9968.6	9804.4	9443.2	9128.3	9327.2	9773.5	9852.7	11079.5	11736.3
32.5°	10650.6	10704.7	10747.2	10571.4	10119.3	9537.8	9514.6	9794.8	9852.7	11031.2	11662.9
35°	11378.9	11448.5	11605.0	11543.1	10948.1	10154.1	9837.3	9922.3	9970.6	11058.2	11628.2
37.5°	12095.7	12178.7	12518.8	12698.4	12033.9	10969.4	10339.6	10237.2	10262.3	11222.5	11666.8
40°	12928.3	13053.9	13569.7	13859.5	13330.2	12060.9	11091.1	10778.1	10787.8	11583.7	11846.5
42.5°	14021.8	14151.2	14709.5	15163.5	14790.7	13440.3	12111.1	11605.0	11595.3	12259.9	12269.5
45°	15354.8	15490.0	16067.7	16571.9	16403.8	15074.7	13417.1	12812.4	12800.8	13326.3	13071.3
47.5°	16865.6	16998.9	17514.7	18034.4	18216.0	16983.4	15080.5	14460.3	14433.3	14808.1	14309.6
50°	18161.9	18248.8	18724.0	19423.4	20242.5	19328.7	17149.5	16552.6	16523.6	16776.7	16127.6
52.5°	18633.2	18683.5	19166.5	20145.9	22189.9	22504.8	19867.7	19098.8	19077.6	19187.7	18548.2
55°	17678.9	17769.7	18362.8	19815.6	23244.7	26094.3	23298.8	22251.7	22091.4	21853.7	21079.0
57.5°	15078.5	15223.4	15861.0	17792.9	22752.1	28941.9	28341.1	25818.0	25582.3	24129.5	23136.5
60°	11297.8	11475.5	12004.9	14089.4	20122.7	29956.2	33850.9	29791.9	29260.7	25941.7	25027.9
62.5°	7752.7	7841.6	8200.9	9559.1	14819.7	28294.7	38460.4	35114.3	34144.5	27912.2	27073.8
65°	5921.3	5952.2	6099.0	6566.6	8825.0	22983.9	40293.8	42136.8	40964.2	30269.1	29196.9
67.5°	4771.8	4746.7	4949.5	5618.0	5909.7	14021.8	38155.2	48780.7	48232.0	33420.1	31333.6
69°	4207.7	4172.9	4379.6	5156.3	5550.4	9269.3	34109.8	50289.5	50324.3	35083.4	31480.4
70°	3786.5	3809.7	4014.5	4881.9	5428.7	7275.6	30245.9	49905.0	50179.4	35705.5	30599.5
72.5°	2528.9	2590.7	3002.2	4053.1	5220.0	5505.9	18262.3	42824.6	43879.4	34304.9	26252.7
75°	1425.7	1472.1	1960.9	3056.3	4918.6	5243.2	9646.0	31550.0	32570.0	28686.9	20244.5
77.5°	699.4	724.5	1108.9	1972.5	4113.0	4995.9	5471.2	21430.6	22595.6	18724.0	11450.4
80°	295.6	309.1	554.5	1217.1	2940.4	4767.9	4062.8	13189.1	13334.0	7335.5	3050.5
82.5°	114.0	117.8	233.8	759.2	1868.2	3717.0	3398.2	6253.6	6102.9	1381.3	695.5
85°	13.5	15.5	85.0	455.9	1039.4	1912.6	2760.7	2695.0	2494.1	274.3	357.4
87.5°	0.0	0.0	5.8	139.1	309.1	896.4	1435.4	1118.6	1008.5	88.9	185.5
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°	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4	11537.4
2.5°	11508.4	11489.1	11384.7	11234.0	11091.1	10913.3	10743.3	10640.9	10559.8	10505.7	10569.5
5°	11539.3	11454.3	11137.4	10731.7	10333.8	9885.6	9468.3	9114.7	8975.6	8821.1	8890.6
7.5°	11529.6	11369.3	10799.4	10076.8	9346.6	8591.2	7876.4	7325.8	7039.9	6759.7	6831.2
10°	11481.3	11210.9	10347.3	9277.0	8183.6	7097.8	6083.6	5312.7	4881.9	4491.7	4547.7
12.5°	11375.1	10998.3	9814.1	8361.3	6898.8	5467.3	4279.2	3292.0	2762.6	2528.9	2557.8
15°	11311.3	10791.6	9250.0	7434.0	5527.2	3807.8	2615.8	1945.4	1703.9	1626.7	1636.3
17.5°	11280.4	10592.6	8666.5	6373.4	4124.6	2424.5	1690.4	1491.4	1439.3	1425.7	1429.6
20°	11249.5	10391.7	8065.7	5324.3	2841.8	1630.5	1389.0	1331.1	1311.8	1294.4	1298.2
22.5°	11197.3	10198.5	7420.5	4261.8	1916.5	1323.4	1251.9	1195.9	1155.3	1134.0	1137.9
25°	11133.6	9995.7	6761.7	3174.1	1398.7	1180.4	1112.8	1033.6	985.3	946.6	948.6
27.5°	11031.2	9746.5	6081.6	2310.6	1174.6	1056.8	966.0	879.0	797.9	753.4	753.4
30°	10888.2	9464.4	5326.3	1653.7	1052.9	935.0	824.9	716.7	629.8	589.2	585.4
32.5°	10729.8	9170.8	4563.2	1253.8	956.3	821.1	695.5	581.5	504.2	471.4	469.5
35°	10594.6	8853.9	3802.0	1051.0	859.7	710.9	573.8	477.2	415.4	388.3	386.4
37.5°	10507.6	8537.1	3060.1	938.9	772.8	608.6	481.0	394.1	349.7	328.4	326.5
40°	10494.1	8301.4	2382.0	853.9	691.6	517.8	401.8	334.2	293.6	270.5	268.5
42.5°	10669.9	8166.2	1827.6	782.4	608.6	438.5	341.9	285.9	243.4	220.2	218.3
45°	11131.7	8208.7	1406.4	718.7	525.5	370.9	289.8	237.6	199.0	181.6	177.7
47.5°	11974.0	8502.3	1118.6	654.9	446.3	314.9	247.3	197.1	164.2	146.8	144.9
50°	13473.1	9192.0	935.0	585.4	372.9	268.5	204.8	160.3	133.3	117.8	115.9
52.5°	15463.0	10420.7	834.6	517.8	309.1	228.0	168.1	127.5	104.3	92.7	90.8
55°	17657.6	11908.3	768.9	444.3	253.1	189.3	133.3	100.5	81.1	71.5	67.6
57.5°	19800.1	13196.9	707.1	372.9	210.6	154.6	106.3	79.2	63.8	54.1	52.2
60°	21768.7	14381.1	635.6	299.4	171.9	121.7	83.1	61.8	50.2	40.6	40.6
62.5°	23876.4	15296.8	537.1	233.8	141.0	92.7	67.6	56.0	40.6	34.8	32.8
65°	26109.7	15976.9	421.2	181.6	110.1	69.5	56.0	58.0	32.8	25.1	23.2
67.5°	27759.6	15841.6	311.0	143.0	85.0	54.1	54.1	61.8	29.0	19.3	17.4
69°	27396.4	14742.4	260.8	123.6	73.4	46.4	50.2	61.8	27.0	17.4	15.5
70°	26343.5	13525.3	229.9	110.1	65.7	42.5	48.3	59.9	25.1	17.4	15.5
72.5°	21938.7	10186.9	179.7	83.1	52.2	34.8	40.6	52.2	25.1	17.4	13.5
75°	16502.4	6520.2	137.2	59.9	38.6	27.0	30.9	38.6	25.1	15.5	13.5
77.5°	8979.5	2351.1	98.5	40.6	27.0	21.3	21.3	29.0	23.2	11.6	7.7
80°	2308.6	591.2	61.8	27.0	21.3	15.5	13.5	19.3	13.5	1.9	0.0
82.5°	569.9	133.3	32.8	19.3	15.5	5.8	5.8	9.7	5.8	0.0	0.0
85°	313.0	65.7	21.3	13.5	7.7	0.0	0.0	1.9	0.0	0.0	0.0
87.5°	160.3	19.3	5.8	3.9	1.9	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)