

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: P510190

Luminaire Tested: **VERD-M-CA4-220-750-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510190
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-5)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-220-750-U-T3-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5000K, 1000mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29673 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

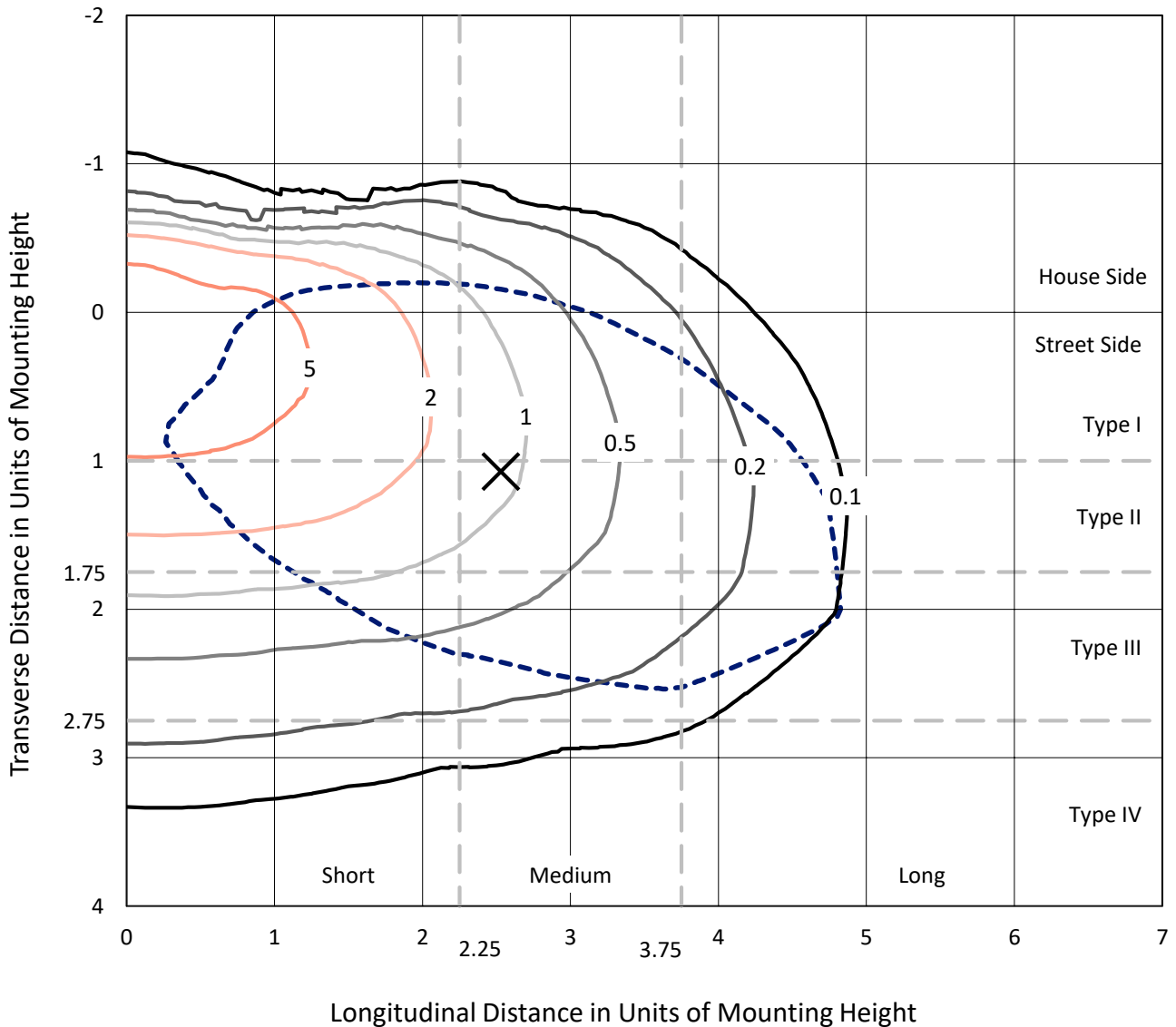
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510190
 CATALOG NUMBER: VERD-M-CA4-220-750-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

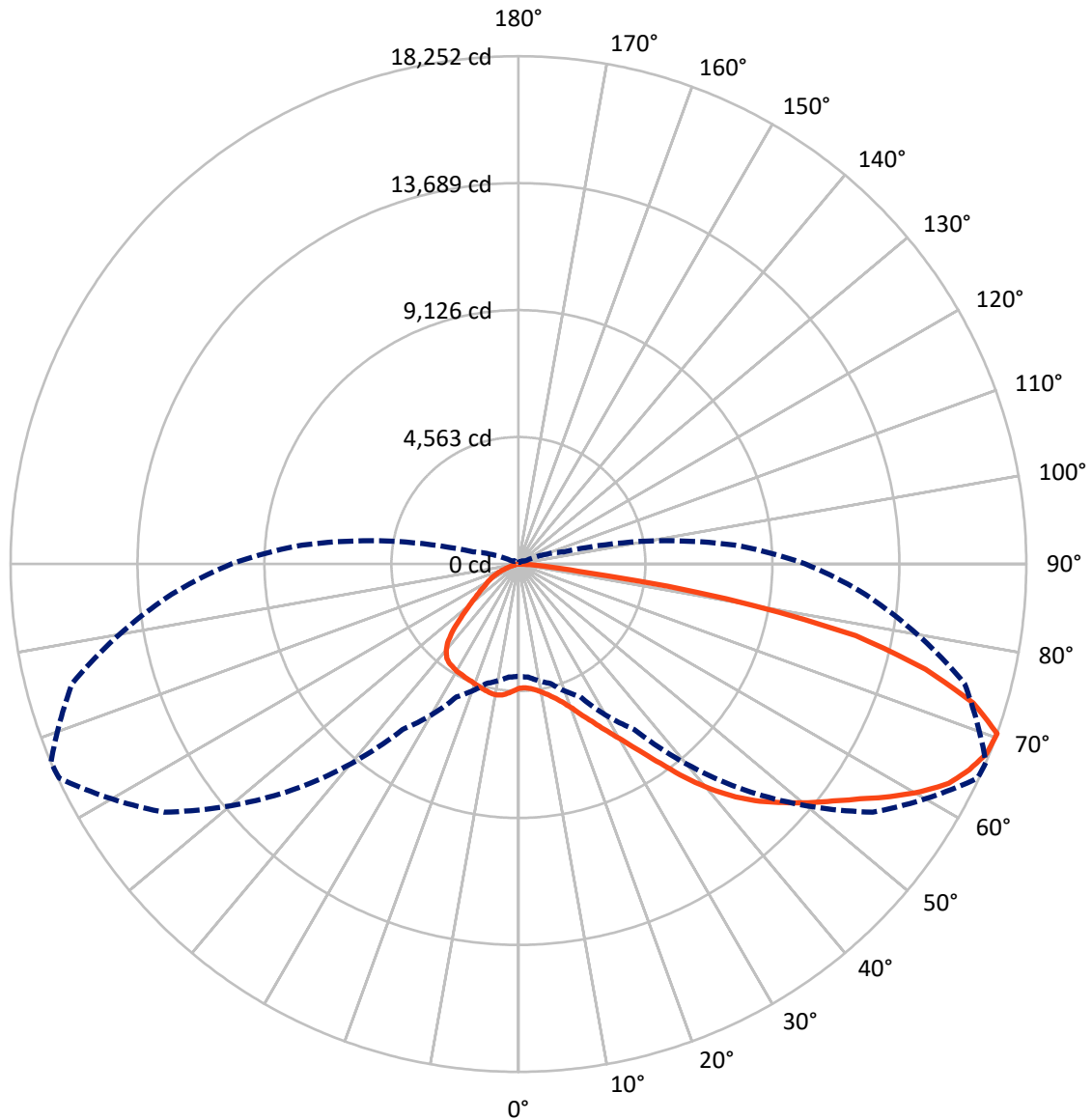
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type III - Medium - N/A

REPORT NUMBER: P510190
CATALOG NUMBER: VERD-M-CA4-220-750-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P510190

CATALOG NUMBER: VERD-M-CA4-220-750-U-T3-HSS

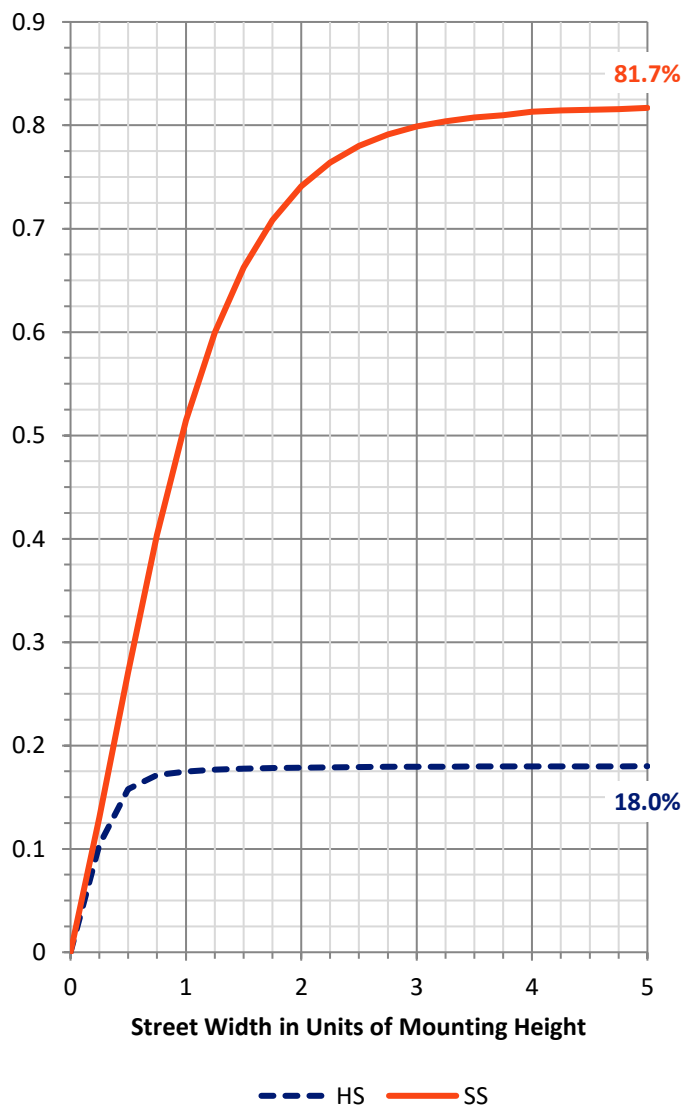
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5406.7	0.0	5406.7
	% Fixture	18.2	0.0	18.2
Street Side	Lumens	24266.3	0.0	24266.3
	% Fixture	81.8	0.0	81.8
Total	Lumens	29673.0	0.0	29673.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	444.7	1.5
10°-20°	1387.4	4.7
20°-30°	2407.2	8.1
30°-40°	3575.1	12.0
40°-50°	4904.9	16.5
50°-60°	6023.4	20.3
60°-70°	6457.8	21.8
70°-80°	4099.5	13.8
80°-90°	373.1	1.3
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°	29673.0	100.0
0°-180°	29673.0	100.0

Coefficient of Utilization



REPORT NUMBER: P510190

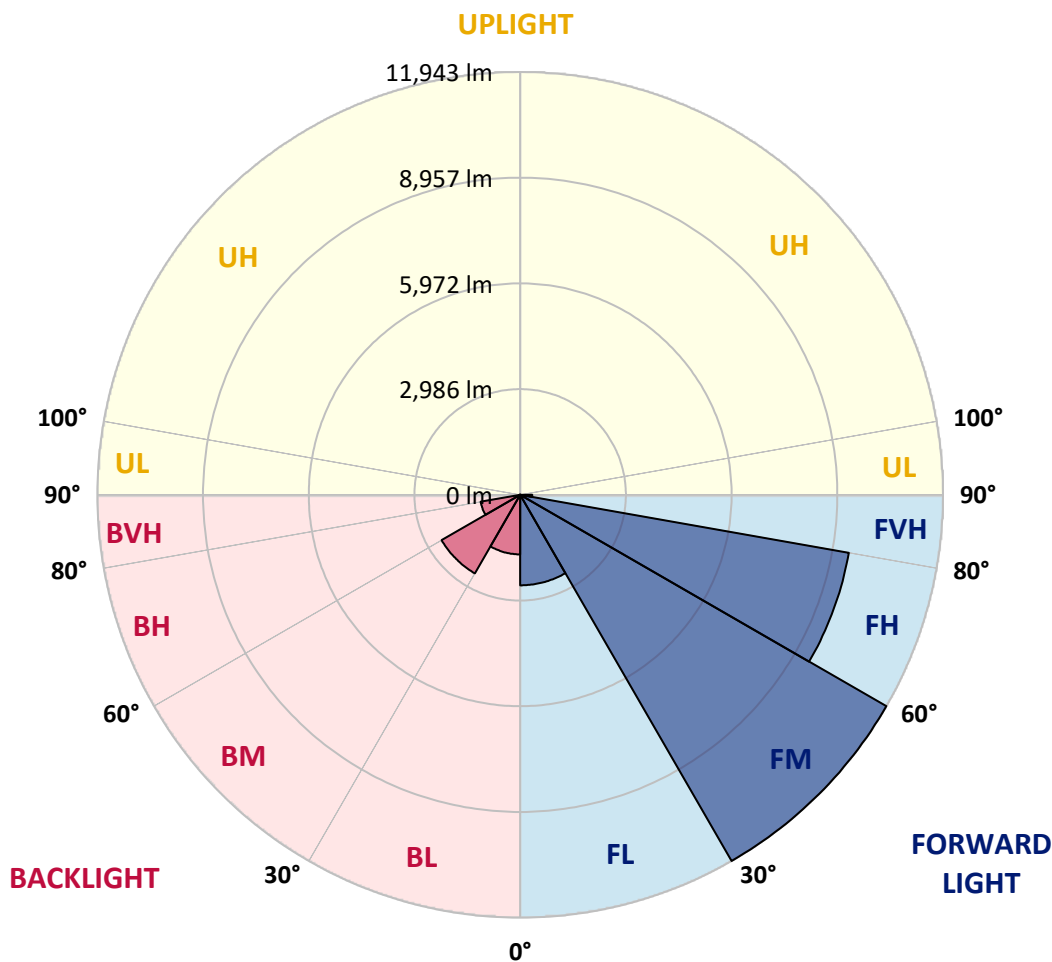
CATALOG NUMBER: VERD-M-CA4-220-750-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2556.6	8.6			
FM (30°-60°)	11943.1	40.2			
FH (60°-80°)	9426.4	31.8			G4/12000
FVH (80°-90°)	340.3	1.1			G3/500
BL (0°-30°)	1682.6	5.7	B3/2500		
BM (30°-60°)	2560.4	8.6	B3/5000		
BH (60°-80°)	1130.9	3.8	B3/2500		G3/2500
BVH (80°-90°)	32.8	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium





REPORT NUMBER: P510190

CATALOG NUMBER: VERD-M-CA4-220-750-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5
2.5°	4423.3	4464.9	4440.5	4437.6	4466.4	4439.1	4457.7	4453.4	4450.6	4454.9	4485.0
5°	4539.6	4588.4	4555.4	4545.3	4561.1	4512.3	4508.0	4497.9	4495.1	4496.5	4539.6
7.5°	4701.8	4759.2	4746.3	4720.5	4711.9	4631.5	4617.1	4581.2	4569.7	4572.6	4615.7
10°	4957.4	5014.8	4988.9	4931.5	4895.6	4803.7	4752.1	4706.1	4683.1	4686.0	4732.0
12.5°	5284.7	5339.2	5296.2	5191.4	5171.3	5023.4	4943.0	4845.4	4829.6	4806.6	4855.4
15°	5593.4	5640.7	5620.6	5523.0	5468.5	5293.3	5145.4	5024.8	5010.5	4988.9	4987.5
17.5°	5935.0	5982.4	5945.1	5873.3	5801.5	5593.4	5434.0	5278.9	5241.6	5223.0	5155.5
20°	6299.7	6374.4	6367.2	6308.3	6222.2	5978.1	5752.7	5577.6	5537.4	5502.9	5360.8
22.5°	6675.8	6773.5	6751.9	6720.4	6684.5	6410.2	6147.5	5945.1	5914.9	5841.7	5617.8
25°	7092.2	7159.7	7143.9	7159.7	7135.3	6892.6	6605.5	6358.6	6318.4	6249.5	5906.3
27.5°	7495.6	7566.0	7593.2	7560.2	7576.0	7402.3	7062.0	6840.9	6802.2	6675.8	6253.8
30°	7860.3	7947.8	7986.6	8001.0	8054.1	7874.6	7623.4	7354.9	7342.0	7212.8	6711.7
32.5°	8151.7	8249.3	8344.1	8405.8	8490.5	8411.6	8161.8	7999.5	8001.0	7884.7	7399.4
35°	8362.8	8474.7	8612.6	8776.2	8954.3	8921.2	8773.4	8776.2	8799.2	8838.0	8276.6
37.5°	8596.8	8687.2	8849.4	9077.7	9349.1	9418.0	9397.9	9626.1	9738.1	9807.0	9047.6
40°	8736.0	8827.9	9030.3	9337.6	9732.4	9897.5	10082.7	10483.2	10629.7	10557.9	9706.5
42.5°	8582.4	8664.2	9016.0	9547.2	10046.8	10421.5	10753.1	11338.9	11445.1	11211.1	10262.1
45°	8382.9	8489.1	8859.5	9604.6	10325.3	10935.5	11450.9	12084.0	12163.0	11831.3	10753.1
47.5°	8219.2	8312.5	8744.6	9542.9	10582.3	11462.4	12063.9	12787.5	12807.6	12398.4	11261.4
50°	8009.6	8123.0	8573.8	9466.8	10737.3	11929.0	12625.2	13443.6	13488.1	12985.6	11692.1
52.5°	7789.9	7900.5	8367.1	9341.9	10849.3	12316.6	13208.1	14141.3	14145.6	13607.2	12151.5
55°	7465.5	7583.2	8100.0	9161.0	10883.8	12573.6	13793.9	14853.4	14897.9	14237.5	12567.8
57.5°	7122.3	7222.8	7778.4	8879.6	10756.0	12816.2	14395.4	15644.5	15766.5	14948.2	12925.3
60°	6667.2	6767.7	7354.9	8510.6	10484.7	13089.0	15084.5	16597.7	16610.7	15523.9	13185.2
62.5°	6177.7	6265.2	6805.1	7932.1	10064.0	13193.8	15676.0	17360.1	17358.6	16036.4	13314.4
65°	5596.2	5632.1	6182.0	7221.4	9410.8	13040.2	15937.3	17862.6	17813.7	16405.4	13271.3
67.5°	4907.1	4945.9	5362.2	6338.5	8463.3	12440.0	15821.0	18105.2	18154.0	16734.1	13084.7
70°	4034.2	4080.2	4443.4	5267.5	7255.9	11482.5	15548.3	18210.0	18251.6	16602.0	12509.0
72.5°	2977.6	3039.3	3261.8	3920.8	5507.2	9647.7	14284.9	17062.9	17085.9	15499.5	11310.2
75°	1849.1	1962.6	2172.2	2605.7	3573.4	6766.3	12210.3	15254.0	15110.4	13825.5	9359.1
77.5°	739.4	758.0	862.8	1220.3	1742.9	3523.1	8850.9	12125.6	12399.8	11061.8	6694.5
80°	430.7	427.8	452.2	568.5	748.0	1204.5	3442.7	6802.2	7581.8	6075.7	3012.0
82.5°	347.4	334.5	334.5	364.7	358.9	506.8	1128.4	1987.0	2179.3	1933.8	857.1
85°	182.3	178.0	145.0	179.5	179.5	252.7	433.6	562.8	594.4	518.3	321.6
87.5°	45.9	45.9	45.9	56.0	44.5	53.1	73.2	89.0	91.9	74.7	47.4
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: P510190

CATALOG NUMBER: VERD-M-CA4-220-750-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5	4463.5
2.5°	4496.5	4509.4	4559.7	4552.5	4561.1	4561.1	4575.5	4591.3	4638.6	4611.4	4599.9
5°	4548.2	4574.0	4637.2	4660.2	4694.6	4698.9	4727.6	4737.7	4789.4	4760.7	4760.7
7.5°	4647.3	4677.4	4736.3	4744.9	4760.7	4733.4	4740.6	4709.0	4743.4	4709.0	4710.4
10°	4759.2	4779.3	4819.5	4762.1	4737.7	4673.1	4658.7	4581.2	4608.5	4564.0	4552.5
12.5°	4866.9	4859.7	4829.6	4727.6	4660.2	4553.9	4509.4	4404.6	4398.9	4340.0	4328.5
15°	4968.8	4918.6	4821.0	4663.0	4548.2	4400.3	4294.1	4179.2	4139.0	4071.5	4065.8
17.5°	5093.7	5007.6	4833.9	4601.3	4413.2	4197.9	4047.1	3917.9	3834.7	3772.9	3771.5
20°	5245.9	5113.8	4839.6	4531.0	4274.0	3998.3	3787.3	3623.6	3504.5	3426.9	3425.5
22.5°	5436.9	5257.4	4892.8	4450.6	4096.0	3757.1	3494.4	3211.6	3047.9	2890.0	2861.3
25°	5660.8	5402.4	4938.7	4408.9	3920.8	3505.9	3115.4	2701.9	2447.8	2321.5	2274.1
27.5°	5975.2	5643.6	5006.2	4330.0	3755.7	3195.8	2627.3	2176.5	1870.7	1763.0	1763.0
30°	6338.5	5948.0	5132.5	4282.6	3526.0	2760.8	2091.8	1607.9	1323.7	1161.5	1157.1
32.5°	6892.6	6311.2	5247.4	4180.7	3247.5	2287.0	1513.2	1036.6	808.3	707.8	702.0
35°	7689.4	7003.2	5432.6	4078.7	2844.1	1702.7	960.5	594.4	460.8	403.4	400.6
37.5°	8456.1	7662.2	5831.7	3876.3	2271.2	1069.6	532.6	343.1	281.4	274.2	271.3
40°	8995.9	8230.7	6113.1	3567.6	1613.7	567.1	308.7	248.4	244.1	241.2	239.8
42.5°	9584.5	8652.8	6312.6	3174.3	957.6	328.8	251.2	224.0	216.8	213.9	213.9
45°	10062.6	9059.1	6350.0	2611.5	482.4	271.3	229.7	203.9	195.3	201.0	202.4
47.5°	10503.3	9442.4	6223.6	1964.0	325.9	252.7	215.3	189.5	183.8	198.1	198.1
50°	10879.5	9766.8	5933.6	1465.8	305.8	238.3	201.0	175.2	173.7	186.6	188.1
52.5°	11254.2	10028.1	5477.1	1106.9	290.0	222.5	186.6	162.2	157.9	166.5	168.0
55°	11551.4	10121.4	5138.2	824.1	278.5	208.2	173.7	149.3	139.3	137.8	140.7
57.5°	11715.0	10039.6	4806.6	605.9	265.6	195.3	160.8	132.1	116.3	116.3	116.3
60°	11717.9	9940.6	4452.0	479.5	251.2	180.9	146.4	113.4	97.6	94.8	94.8
62.5°	11686.3	9764.0	3936.6	416.3	235.4	169.4	127.8	96.2	84.7	80.4	80.4
65°	11547.1	9430.9	3312.1	356.0	216.8	160.8	109.1	86.1	76.1	70.3	70.3
67.5°	11113.5	8806.4	2549.7	310.1	199.6	142.1	99.1	77.5	67.5	61.7	60.3
70°	10318.1	7797.1	1682.6	264.2	182.3	126.3	90.4	70.3	60.3	54.6	53.1
72.5°	8984.4	6345.6	845.6	224.0	156.5	116.3	81.8	61.7	51.7	45.9	45.9
75°	7040.5	4404.6	460.8	178.0	123.5	101.9	71.8	51.7	44.5	40.2	40.2
77.5°	4317.0	2183.6	314.4	137.8	93.3	83.3	57.4	43.1	38.8	37.3	37.3
80°	1574.9	715.0	211.0	97.6	70.3	64.6	45.9	37.3	35.9	35.9	35.9
82.5°	568.5	363.2	142.1	66.0	44.5	48.8	37.3	31.6	30.1	31.6	33.0
85°	234.0	159.4	51.7	37.3	24.4	25.8	23.0	21.5	23.0	24.4	24.4
87.5°	35.9	31.6	18.7	18.7	14.4	12.9	10.0	11.5	14.4	17.2	17.2
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)