

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: P884156

Luminaire Tested: **NVN-SB4D-830-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884156
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB4D-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26350 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

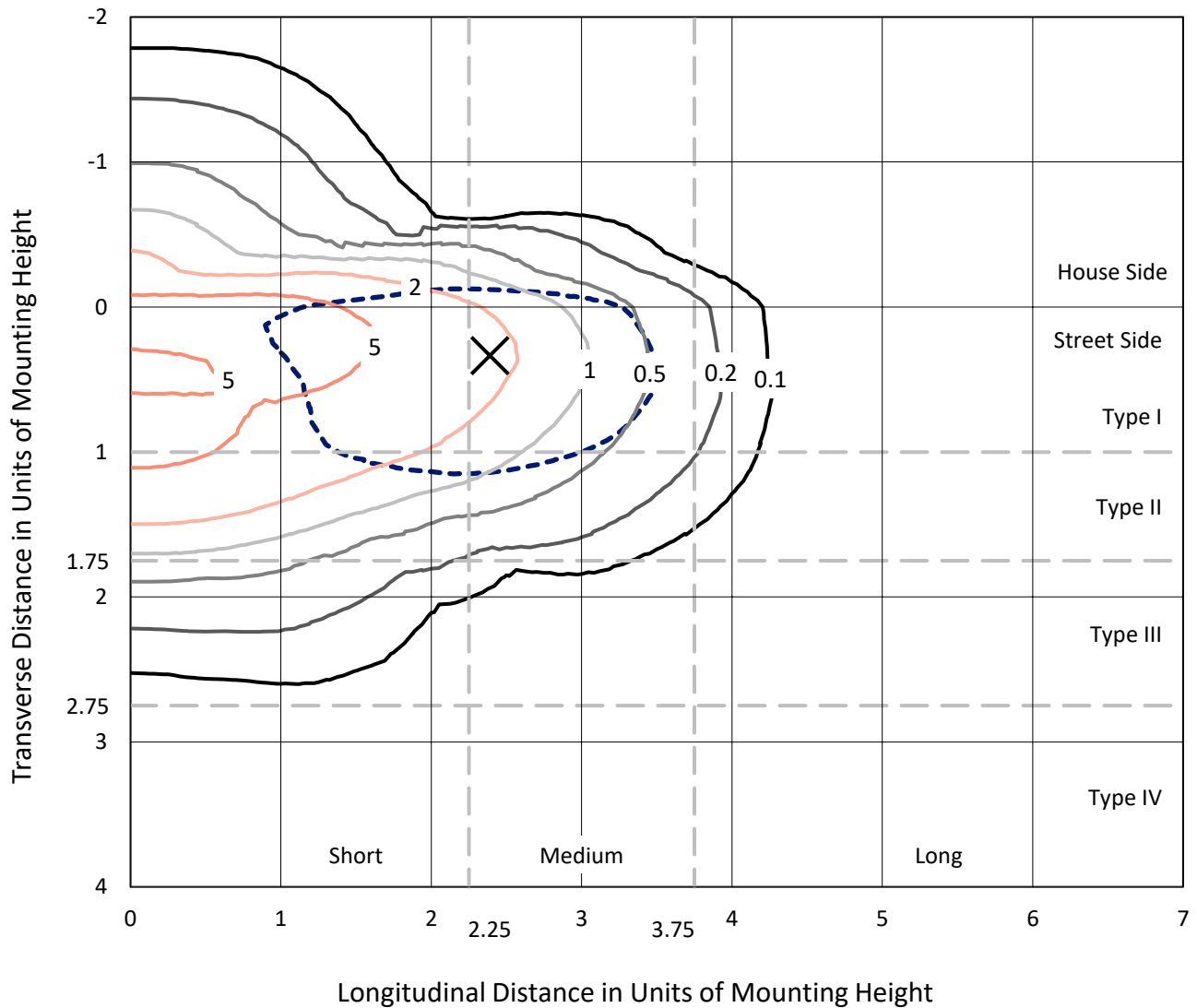
Input Watts (W): 293.6
Input Voltage (V): 120.0
Input Current (Ain): 2.469
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

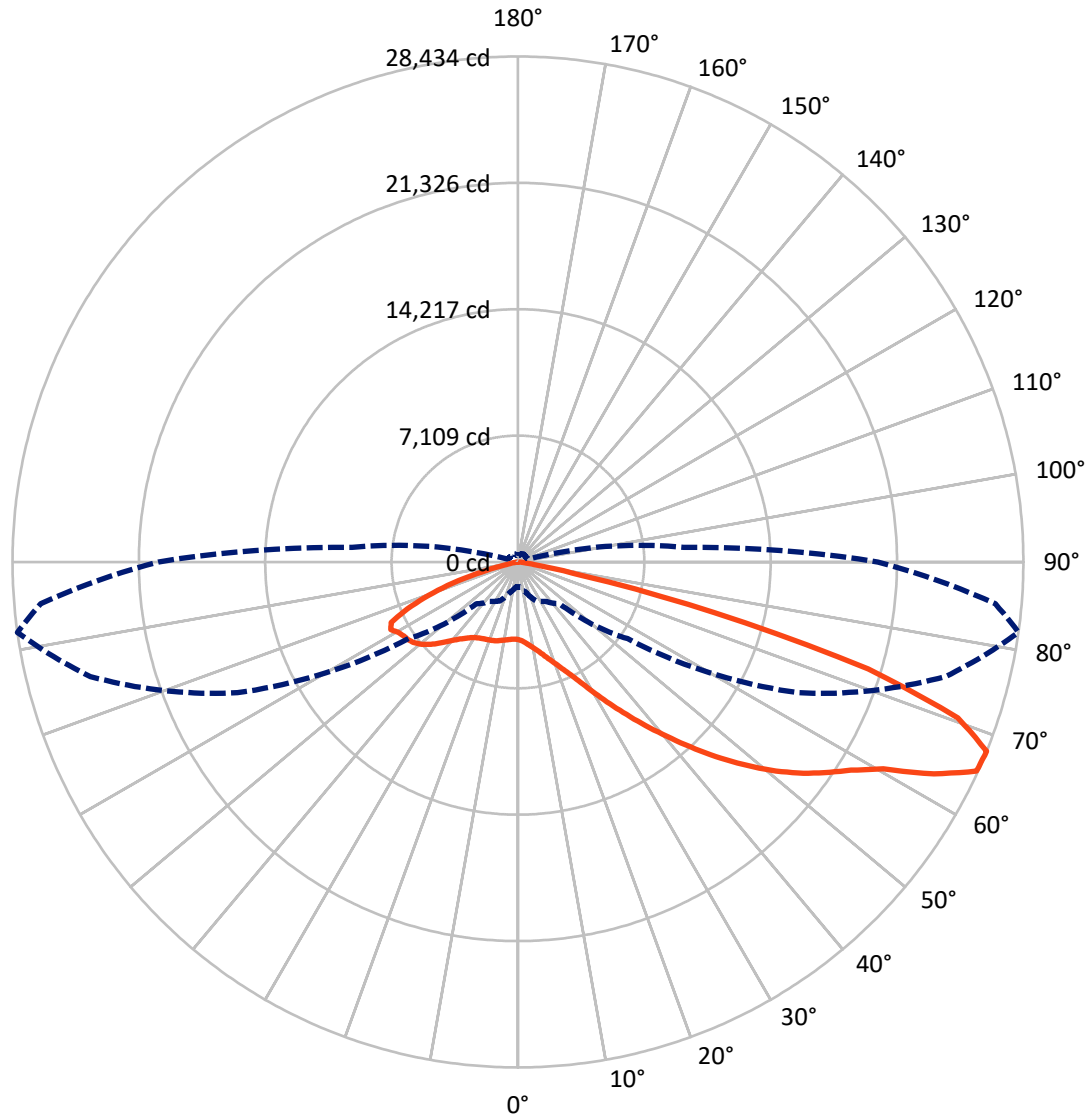
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4773.1	0.0	4773.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	21576.9	0.0	21576.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	26350.0	0.0	26350.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.9	1.5
10°-20°	1010.6	3.8
20°-30°	1618.7	6.1
30°-40°	2862.4	10.9
40°-50°	5015.2	19.0
50°-60°	6688.8	25.4
60°-70°	6227.0	23.6
70°-80°	2389.9	9.1
80°-90°	148.4	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°	26350.0	100.0
0°-180°	26350.0	100.0

Coefficient of Utilization



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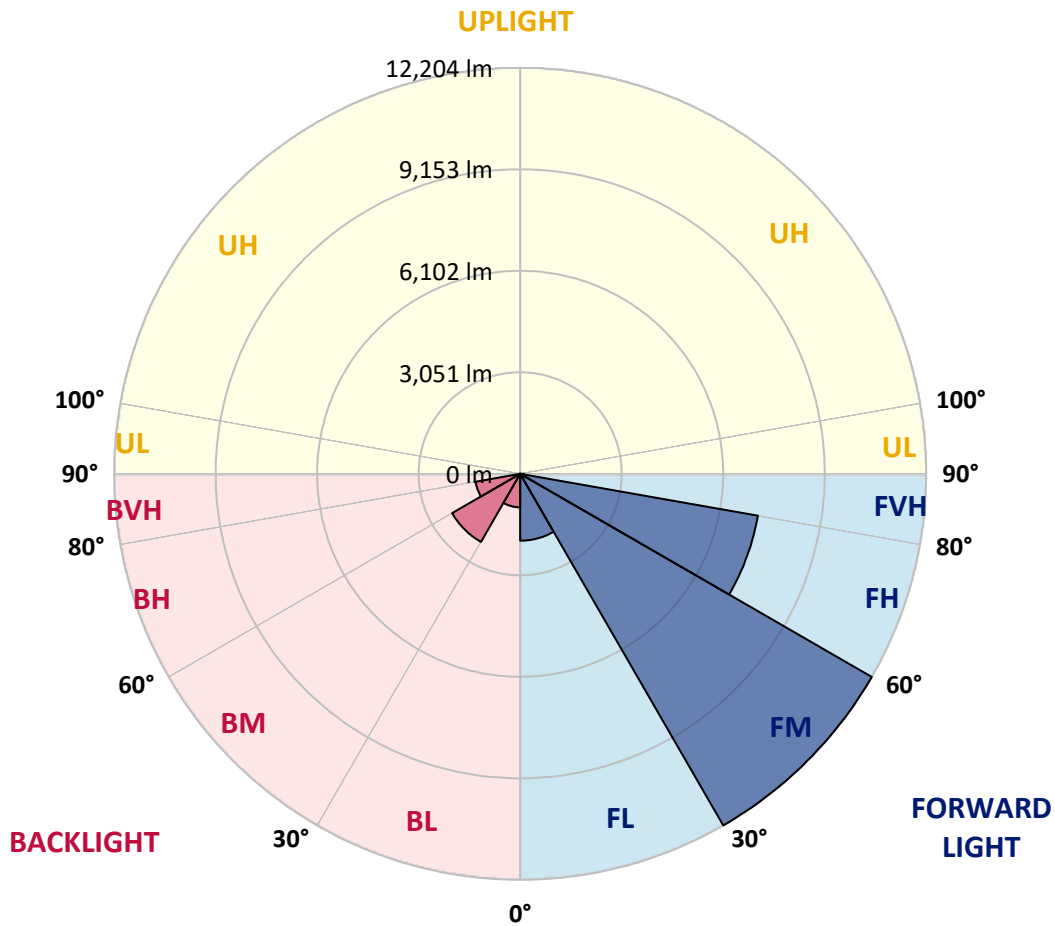
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2010.2	7.6			
FM (30°-60°)	12204.2	46.3			
FH (60°-80°)	7254.6	27.5			G3/7500
FVH (80°-90°)	107.9	0.4			G2/225
BL (0°-30°)	1008.1	3.8	B3/2500		
BM (30°-60°)	2362.2	9.0	B2/2500		
BH (60°-80°)	1362.3	5.2	B3/2500		G3/2500
BVH (80°-90°)	40.5	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3
2.5°	4613.8	4640.4	4625.2	4617.6	4604.3	4585.4	4570.2	4522.8	4473.4	4441.2	4429.8
5°	4706.8	4733.3	4731.4	4739.0	4748.5	4754.2	4750.4	4697.3	4627.1	4572.1	4539.8
7.5°	4627.1	4657.5	4682.1	4720.1	4786.5	4856.7	4890.8	4879.4	4807.3	4731.4	4691.6
10°	4401.3	4433.6	4492.4	4581.6	4722.0	4873.7	5000.8	5059.7	5014.1	4930.6	4875.6
12.5°	3987.8	4020.0	4135.8	4329.3	4564.5	4828.2	5071.0	5228.5	5239.9	5156.4	5091.9
15°	3523.0	3555.2	3678.5	3921.4	4279.9	4703.0	5109.0	5406.8	5507.4	5435.3	5357.5
17.5°	3234.6	3263.1	3356.0	3551.4	3925.2	4452.6	5095.7	5596.5	5826.1	5769.2	5676.2
20°	3147.3	3172.0	3215.6	3352.2	3663.4	4192.7	5008.4	5774.9	6169.5	6137.2	6032.9
22.5°	3240.3	3263.1	3276.3	3337.1	3532.5	4021.9	4898.4	5957.0	6567.9	6571.7	6444.6
25°	3454.7	3477.4	3462.3	3500.2	3585.6	3968.8	4856.7	6171.4	7068.7	7110.5	6966.3
27.5°	3807.5	3809.4	3773.4	3771.5	3784.8	4048.5	4900.3	6400.9	7700.5	7778.2	7599.9
30°	4515.2	4486.7	4348.2	4198.4	4130.1	4287.5	5021.7	6672.2	8446.0	8584.5	8360.7
32.5°	5606.0	5564.3	5310.1	4951.5	4591.1	4672.6	5239.9	6981.4	9258.0	9508.4	9235.2
35°	6789.8	6778.5	6512.9	5979.8	5349.9	5220.9	5594.6	7387.4	10144.0	10542.4	10218.0
37.5°	7890.2	7884.5	7732.7	7104.8	6338.3	5985.5	6163.8	7918.6	11092.5	11669.3	11286.0
40°	8895.7	8912.7	8761.0	8199.4	7427.3	6966.3	6937.8	8575.0	12147.3	12896.7	12441.4
42.5°	9764.5	9783.5	9629.8	9214.4	8503.0	8051.4	7888.3	9379.4	13177.5	14215.2	13676.4
45°	10354.6	10472.2	10449.4	10117.4	9607.1	9138.5	9030.4	10388.7	14351.8	15613.4	14981.7
47.5°	10521.5	10629.6	10800.4	10845.9	10534.8	10073.8	10202.8	11604.8	15539.4	17013.5	16294.5
50°	10109.8	10210.4	10565.1	11037.5	11253.8	11111.5	11343.0	12908.1	16755.5	18409.8	17582.6
52.5°	9297.8	9400.3	9848.0	10595.5	11477.7	11925.4	12486.9	14192.5	17933.6	19732.1	18802.5
55°	8123.5	8231.7	8806.5	9652.6	11050.8	12261.2	13441.2	15474.9	19013.1	20921.6	19902.8
57.5°	6526.1	6605.8	7203.4	8387.2	9977.0	11927.3	14145.0	16875.0	20029.9	22090.2	20993.7
60°	4253.4	4323.6	5017.9	6338.3	8197.5	10811.8	14285.4	18436.3	21380.7	23609.8	22464.0
62.5°	2828.6	2876.1	3287.7	4257.2	5773.0	8669.9	13464.0	19682.8	23361.3	26254.4	24985.2
65°	1940.8	1988.2	2399.9	3075.3	3729.8	5735.0	11102.0	19517.7	25156.0	28354.6	26853.9
67.5°	1384.9	1424.7	1773.8	2411.3	2699.6	3331.4	7525.9	17408.1	24898.0	28434.2	26954.5
70°	992.2	1015.0	1303.3	1878.2	2145.7	2001.5	4185.1	13314.1	21800.0	26256.3	24901.8
72.5°	694.4	701.9	904.9	1430.4	1728.3	1460.8	1992.0	8876.7	16488.0	20608.6	19305.2
75°	470.5	480.0	609.0	1049.1	1386.8	1115.5	1054.8	4759.9	9679.2	11407.5	10225.5
77.5°	288.4	292.2	392.7	717.1	1037.7	849.9	679.2	2016.7	3744.9	3676.6	3134.1
80°	163.2	163.2	250.4	445.8	707.6	548.3	476.2	857.5	1185.7	1041.5	918.2
82.5°	91.1	93.0	182.1	277.0	468.6	324.4	261.8	396.5	512.2	453.4	394.6
85°	37.9	41.7	111.9	130.9	223.9	161.3	106.2	166.9	189.7	168.8	123.3
87.5°	3.8	5.7	34.1	24.7	26.6	32.3	15.2	32.3	26.6	26.6	19.0
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°	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3	4365.3
2.5°	4393.8	4365.3	4293.2	4209.7	4099.7	4046.6	3974.5	3925.2	3883.4	3887.2	3849.3
5°	4479.1	4407.0	4245.8	4044.7	3794.3	3615.9	3426.2	3295.3	3189.1	3166.3	3115.1
7.5°	4596.8	4482.9	4200.3	3837.9	3414.8	3094.2	2807.8	2623.7	2492.8	2451.1	2409.4
10°	4748.5	4583.5	4141.4	3578.0	2969.0	2561.1	2253.8	2109.6	2020.4	1990.1	1967.3
12.5°	4925.0	4699.2	4063.7	3261.2	2509.9	2117.2	1921.8	1849.7	1821.2	1811.8	1806.1
15°	5146.9	4843.4	3946.0	2885.5	2121.0	1845.9	1762.4	1753.0	1756.7	1753.0	1751.1
17.5°	5410.6	5000.8	3754.4	2498.5	1859.2	1707.4	1677.1	1684.7	1694.1	1692.2	1688.4
20°	5699.0	5156.4	3509.7	2155.1	1680.9	1608.8	1591.7	1599.3	1606.9	1603.1	1601.2
22.5°	6027.2	5323.4	3238.4	1887.6	1561.3	1517.7	1498.7	1500.6	1500.6	1493.0	1489.2
25°	6419.9	5507.4	2953.8	1697.9	1470.3	1436.1	1413.4	1405.8	1394.4	1371.6	1367.8
27.5°	6888.5	5702.8	2680.6	1565.1	1398.2	1365.9	1339.4	1320.4	1291.9	1254.0	1250.2
30°	7415.9	5939.9	2449.2	1481.7	1341.3	1309.0	1278.7	1250.2	1208.5	1161.0	1157.3
32.5°	8036.3	6194.1	2280.4	1426.6	1290.1	1255.9	1219.9	1185.7	1140.2	1092.7	1094.6
35°	8776.1	6501.5	2181.7	1388.7	1250.2	1204.7	1164.8	1126.9	1092.7	1051.0	1047.2
37.5°	9578.6	6827.8	2151.3	1369.7	1223.7	1153.5	1107.9	1081.4	1077.6	1052.9	1051.0
40°	10457.0	7214.8	2174.1	1358.3	1195.2	1104.1	1054.8	1049.1	1058.6	1015.0	1016.9
42.5°	11386.6	7673.9	2212.1	1345.1	1155.4	1054.8	1007.4	1007.4	999.8	939.1	939.1
45°	12392.1	8203.2	2250.0	1312.8	1107.9	1005.5	969.4	956.2	923.9	865.1	863.2
47.5°	13405.1	8742.0	2278.5	1254.0	1051.0	963.7	931.5	901.1	853.7	800.6	798.7
50°	14367.0	9225.8	2248.1	1166.7	986.5	923.9	889.8	848.0	796.8	760.8	755.1
52.5°	15226.4	9645.0	2119.1	1064.3	918.2	882.2	851.8	808.2	766.4	728.5	724.7
55°	15973.9	9984.6	1891.4	967.5	857.5	846.1	815.8	760.8	703.8	671.6	667.8
57.5°	16691.0	10242.6	1606.9	887.9	802.5	806.3	760.8	711.4	658.3	624.2	620.4
60°	17645.2	10587.9	1318.5	813.9	743.7	755.1	705.7	669.7	603.3	559.7	554.0
62.5°	19170.5	11124.8	1047.2	722.8	675.4	679.2	658.3	614.7	535.0	483.8	480.0
65°	20380.9	10927.5	825.3	624.2	597.6	603.3	603.3	555.9	470.5	411.7	406.0
67.5°	20244.3	9356.7	658.3	527.4	523.6	527.4	540.7	500.8	417.4	369.9	362.4
70°	18648.8	7442.5	527.4	438.2	455.3	445.8	483.8	457.2	375.6	328.2	322.5
72.5°	15216.9	5361.3	402.2	362.4	349.1	364.2	436.3	411.7	313.0	259.9	254.2
75°	8891.9	2860.9	299.7	286.5	252.3	303.5	387.0	351.0	239.0	191.6	185.9
77.5°	2895.0	997.9	220.1	210.6	187.8	244.7	330.1	296.0	195.4	151.8	146.1
80°	775.9	301.6	149.9	138.5	121.4	182.1	261.8	235.2	140.4	98.7	96.8
82.5°	311.1	127.1	87.3	77.8	66.4	125.2	206.8	189.7	104.3	62.6	62.6
85°	100.5	41.7	32.3	24.7	30.4	77.8	123.3	129.0	74.0	32.3	24.7
87.5°	13.3	5.7	5.7	7.6	5.7	13.3	37.9	36.0	20.9	3.8	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)