

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: LUMARK

Report Number: P884756

Luminaire Tested: **NAV-SB5D-722-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884756
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: LUMARK
Catalog Number: NAV-SB5D-722-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 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: 30047 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

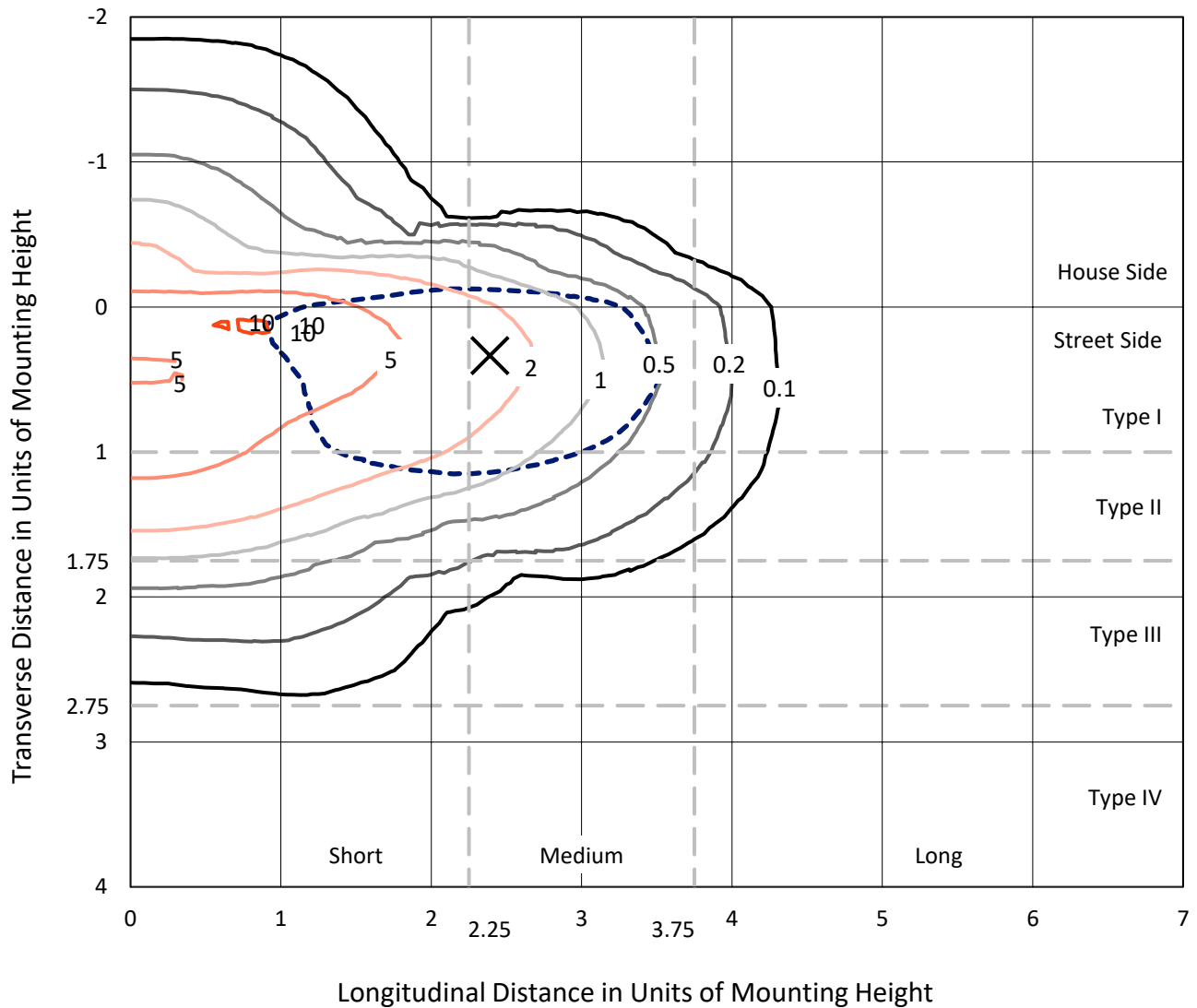
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

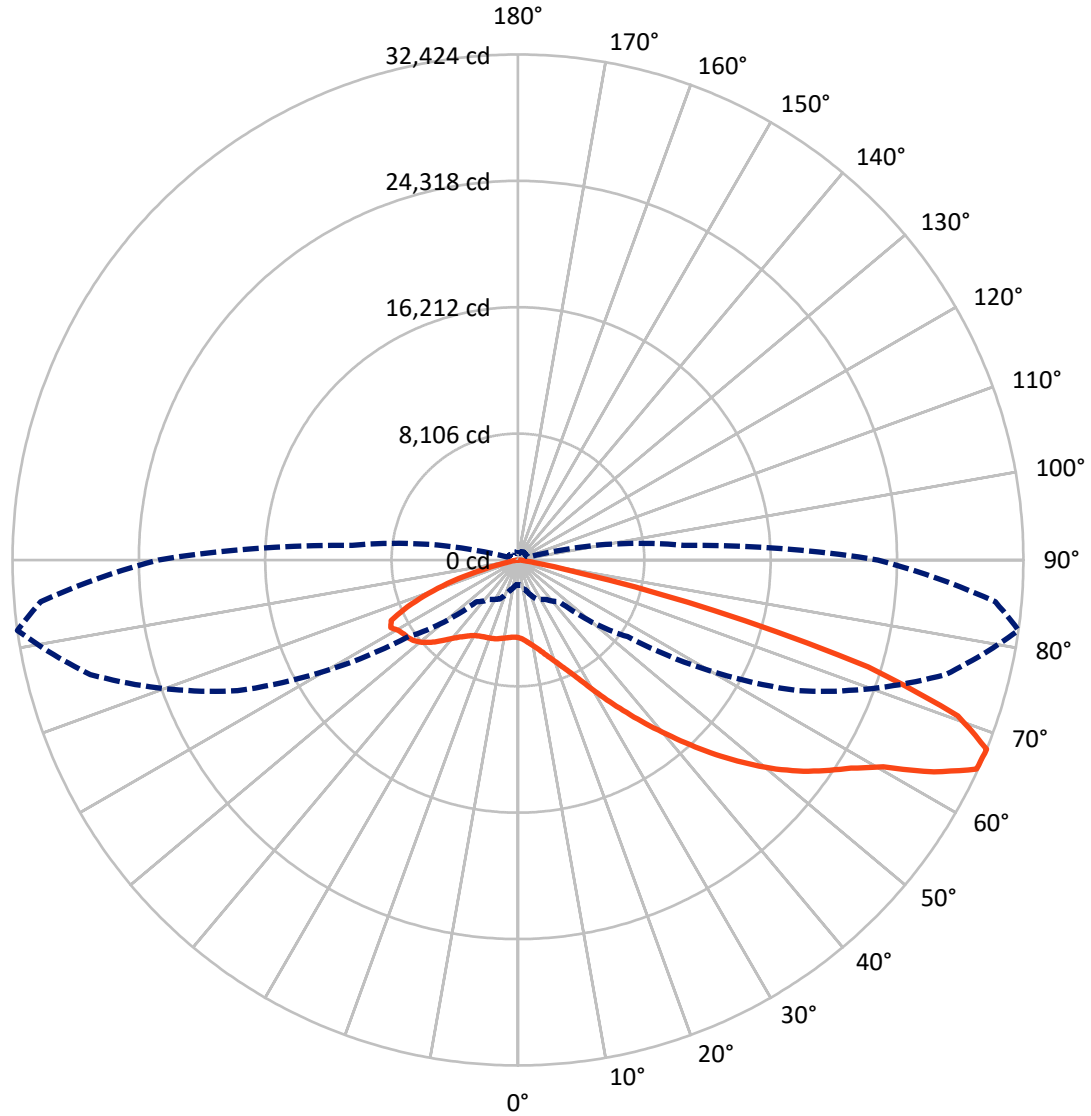
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 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	5442.7	0.0	5442.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	24604.2	0.0	24604.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	30047.0	0.0	30047.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	443.5	1.5
10°-20°	1152.4	3.8
20°-30°	1845.8	6.1
30°-40°	3264.0	10.9
40°-50°	5718.8	19.0
50°-60°	7627.3	25.4
60°-70°	7100.6	23.6
70°-80°	2725.2	9.1
80°-90°	169.3	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°	30047.0	100.0
0°-180°	30047.0	100.0

Coefficient of Utilization



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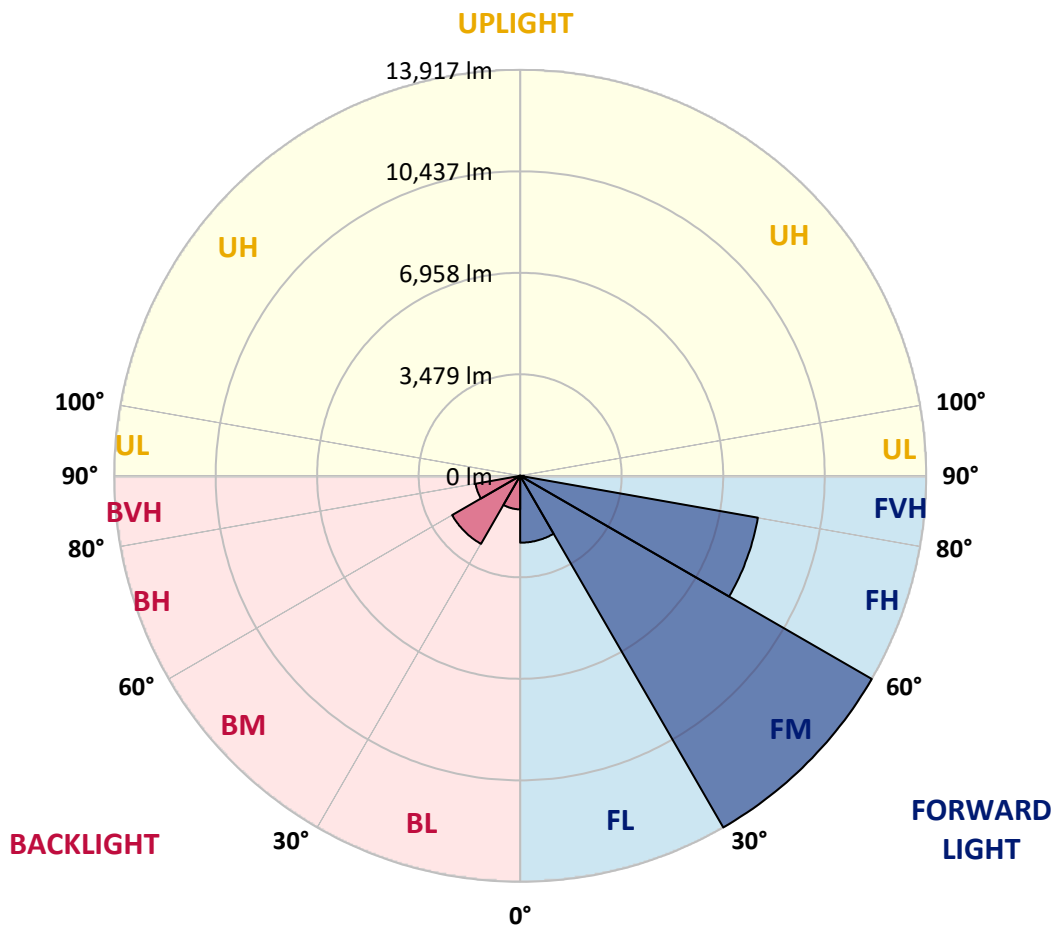
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2292.3	7.6			
FM (30°-60°)	13916.5	46.3			
FH (60°-80°)	8272.4	27.5			G4/12000
FVH (80°-90°)	123.1	0.4			G2/225
BL (0°-30°)	1149.5	3.8	B3/2500		
BM (30°-60°)	2693.6	9.0	B3/5000		
BH (60°-80°)	1553.5	5.2	B3/2500		G3/2500
BVH (80°-90°)	46.2	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-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8
2.5°	5261.2	5291.5	5274.1	5265.5	5250.3	5228.7	5211.4	5157.3	5101.1	5064.3	5051.3
5°	5367.2	5397.5	5395.3	5403.9	5414.8	5421.2	5416.9	5356.3	5276.3	5213.6	5176.8
7.5°	5276.3	5310.9	5339.0	5382.3	5458.0	5538.1	5577.0	5564.0	5481.8	5395.3	5349.9
10°	5018.9	5055.7	5122.7	5224.4	5384.5	5557.5	5702.5	5769.5	5717.6	5622.4	5559.7
12.5°	4547.3	4584.0	4716.0	4936.7	5204.9	5505.6	5782.5	5962.1	5975.1	5879.9	5806.3
15°	4017.3	4054.0	4194.7	4471.6	4880.4	5362.8	5825.8	6165.4	6280.1	6197.9	6109.2
17.5°	3688.4	3720.9	3826.9	4049.7	4475.9	5077.3	5810.6	6381.8	6643.5	6578.6	6472.6
20°	3588.9	3617.1	3666.8	3822.6	4177.3	4780.9	5711.1	6585.1	7035.1	6998.3	6879.3
22.5°	3694.9	3720.9	3736.0	3805.3	4028.1	4586.2	5585.7	6792.8	7489.4	7493.7	7348.8
25°	3939.4	3965.3	3948.0	3991.3	4088.7	4525.6	5538.1	7037.2	8060.5	8108.1	7943.7
27.5°	4341.8	4343.9	4302.8	4300.7	4315.8	4616.5	5587.8	7299.0	8780.9	8869.6	8666.2
30°	5148.7	5116.2	4958.3	4787.4	4709.5	4889.1	5726.3	7608.4	9631.0	9789.0	9533.7
32.5°	6392.6	6345.0	6055.1	5646.2	5235.2	5328.2	5975.1	7961.0	10556.9	10842.5	10531.0
35°	7742.5	7729.5	7426.6	6818.7	6100.5	5953.4	6379.6	8423.9	11567.2	12021.5	11651.6
37.5°	8997.2	8990.7	8817.6	8101.6	7227.6	6825.2	7028.6	9029.6	12648.9	13306.5	12869.5
40°	10143.7	10163.2	9990.2	9349.8	8469.3	7943.7	7911.2	9778.2	13851.7	14706.2	14187.0
42.5°	11134.5	11156.2	10980.9	10507.2	9695.9	9181.1	8995.0	10695.4	15026.3	16209.7	15595.3
45°	11807.3	11941.5	11915.5	11536.9	10955.0	10420.7	10297.3	11846.3	16365.4	17804.0	17083.6
47.5°	11997.7	12121.0	12315.7	12367.6	12012.8	11487.2	11634.3	13233.0	17719.7	19400.5	18580.7
50°	11528.3	11642.9	12047.5	12586.1	12832.7	12670.5	12934.4	14719.1	19106.3	20992.7	20049.5
52.5°	10602.4	10719.2	11229.7	12082.1	13088.0	13598.6	14238.9	16183.7	20449.7	22500.6	21440.5
55°	9263.3	9386.6	10042.1	11006.9	12601.3	13981.5	15327.0	17646.1	21680.7	23857.0	22695.3
57.5°	7441.8	7532.6	8214.1	9564.0	11376.8	13600.7	16129.6	19242.6	22840.2	25189.6	23939.2
60°	4850.1	4930.2	5721.9	7227.6	9347.7	12328.7	16289.7	21023.0	24380.5	26922.4	25615.7
62.5°	3225.5	3279.6	3749.0	4854.5	6582.9	9886.3	15353.0	22444.3	26639.0	29938.0	28490.8
65°	2213.1	2267.1	2736.6	3506.7	4253.1	6539.7	12659.7	22256.1	28685.5	32332.8	30621.6
67.5°	1579.2	1624.6	2022.7	2749.6	3078.4	3798.8	8581.8	19850.5	28391.3	32423.7	30736.3
70°	1131.4	1157.4	1486.2	2141.7	2446.7	2282.3	4772.3	15182.1	24858.6	29940.2	28395.6
72.5°	791.8	800.4	1031.9	1631.1	1970.8	1665.7	2271.5	10122.1	18801.3	23500.0	22013.8
75°	536.5	547.3	694.4	1196.3	1581.4	1272.0	1202.8	5427.7	11037.2	13008.0	11660.2
77.5°	328.8	333.1	447.8	817.7	1183.3	969.2	774.5	2299.6	4270.4	4192.5	3573.8
80°	186.0	186.0	285.6	508.4	806.9	625.2	543.0	977.8	1352.1	1187.7	1047.0
82.5°	103.8	106.0	207.7	315.8	534.3	369.9	298.5	452.1	584.1	517.0	450.0
85°	43.3	47.6	127.6	149.3	255.3	183.9	121.1	190.4	216.3	192.5	140.6
87.5°	4.3	6.5	38.9	28.1	30.3	36.8	17.3	36.8	30.3	30.3	21.6
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°	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8	4977.8
2.5°	5010.2	4977.8	4895.6	4800.4	4674.9	4614.3	4532.1	4475.9	4428.3	4432.6	4389.4
5°	5107.6	5025.4	4841.5	4612.2	4326.6	4123.3	3906.9	3757.7	3636.5	3610.6	3552.2
7.5°	5241.7	5111.9	4789.6	4376.4	3894.0	3528.4	3201.7	2991.9	2842.6	2795.0	2747.4
10°	5414.8	5226.6	4722.5	4080.0	3385.6	2920.5	2570.0	2405.6	2303.9	2269.3	2243.4
12.5°	5615.9	5358.5	4633.8	3718.7	2862.1	2414.3	2191.4	2109.2	2076.8	2066.0	2059.5
15°	5869.1	5522.9	4499.7	3290.4	2418.6	2104.9	2009.7	1998.9	2003.2	1998.9	1996.7
17.5°	6169.8	5702.5	4281.2	2849.1	2120.0	1947.0	1912.4	1921.0	1931.8	1929.7	1925.3
20°	6498.6	5879.9	4002.1	2457.5	1916.7	1834.5	1815.0	1823.7	1832.3	1828.0	1825.8
22.5°	6872.8	6070.2	3692.8	2152.5	1780.4	1730.6	1709.0	1711.2	1711.2	1702.5	1698.2
25°	7320.6	6280.1	3368.3	1936.2	1676.6	1637.6	1611.7	1603.0	1590.0	1564.1	1559.7
27.5°	7855.0	6502.9	3056.8	1784.7	1594.4	1557.6	1527.3	1505.7	1473.2	1429.9	1425.6
30°	8456.4	6773.3	2792.8	1689.5	1529.5	1492.7	1458.1	1425.6	1378.0	1323.9	1319.6
32.5°	9163.8	7063.2	2600.3	1626.8	1471.0	1432.1	1391.0	1352.1	1300.1	1246.1	1248.2
35°	10007.5	7413.7	2487.8	1583.5	1425.6	1373.7	1328.3	1285.0	1246.1	1198.5	1194.1
37.5°	10922.5	7785.7	2453.2	1561.9	1395.3	1315.3	1263.4	1233.1	1228.8	1200.6	1198.5
40°	11924.2	8227.1	2479.2	1548.9	1362.9	1259.0	1202.8	1196.3	1207.1	1157.4	1159.5
42.5°	12984.2	8750.6	2522.4	1533.8	1317.5	1202.8	1148.7	1148.7	1140.1	1070.8	1070.8
45°	14130.7	9354.1	2565.7	1497.0	1263.4	1146.6	1105.5	1090.3	1053.5	986.5	984.3
47.5°	15285.9	9968.5	2598.1	1429.9	1198.5	1099.0	1062.2	1027.6	973.5	912.9	910.8
50°	16382.7	10520.2	2563.5	1330.4	1124.9	1053.5	1014.6	967.0	908.6	867.5	861.0
52.5°	17362.7	10998.3	2416.4	1213.6	1047.0	1005.9	971.3	921.6	874.0	830.7	826.4
55°	18215.1	11385.5	2156.8	1103.3	977.8	964.8	930.2	867.5	802.6	765.8	761.5
57.5°	19032.8	11679.7	1832.3	1012.4	915.1	919.4	867.5	811.2	750.7	711.7	707.4
60°	20120.9	12073.4	1503.5	928.1	848.0	861.0	804.8	763.6	687.9	638.2	631.7
62.5°	21860.2	12685.6	1194.1	824.2	770.1	774.5	750.7	700.9	610.1	551.6	547.3
65°	23240.4	12460.7	941.0	711.7	681.4	687.9	687.9	633.8	536.5	469.4	462.9
67.5°	23084.7	10669.4	750.7	601.4	597.1	601.4	616.5	571.1	475.9	421.8	413.2
70°	21265.3	8486.7	601.4	499.7	519.2	508.4	551.6	521.4	428.3	374.3	367.8
72.5°	17351.9	6113.5	458.6	413.2	398.0	415.4	497.6	469.4	356.9	296.4	289.9
75°	10139.4	3262.3	341.8	326.7	287.7	346.1	441.3	400.2	272.6	218.5	212.0
77.5°	3301.2	1137.9	250.9	240.1	214.2	279.1	376.4	337.5	222.8	173.1	166.6
80°	884.8	344.0	170.9	157.9	138.5	207.7	298.5	268.3	160.1	112.5	110.3
82.5°	354.8	144.9	99.5	88.7	75.7	142.8	235.8	216.3	119.0	71.4	71.4
85°	114.7	47.6	36.8	28.1	34.6	88.7	140.6	147.1	84.4	36.8	28.1
87.5°	15.1	6.5	6.5	8.7	6.5	15.1	43.3	41.1	23.8	4.3	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)