

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: P884779

Luminaire Tested: **NAV-SB5D-730-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-730-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 50864 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

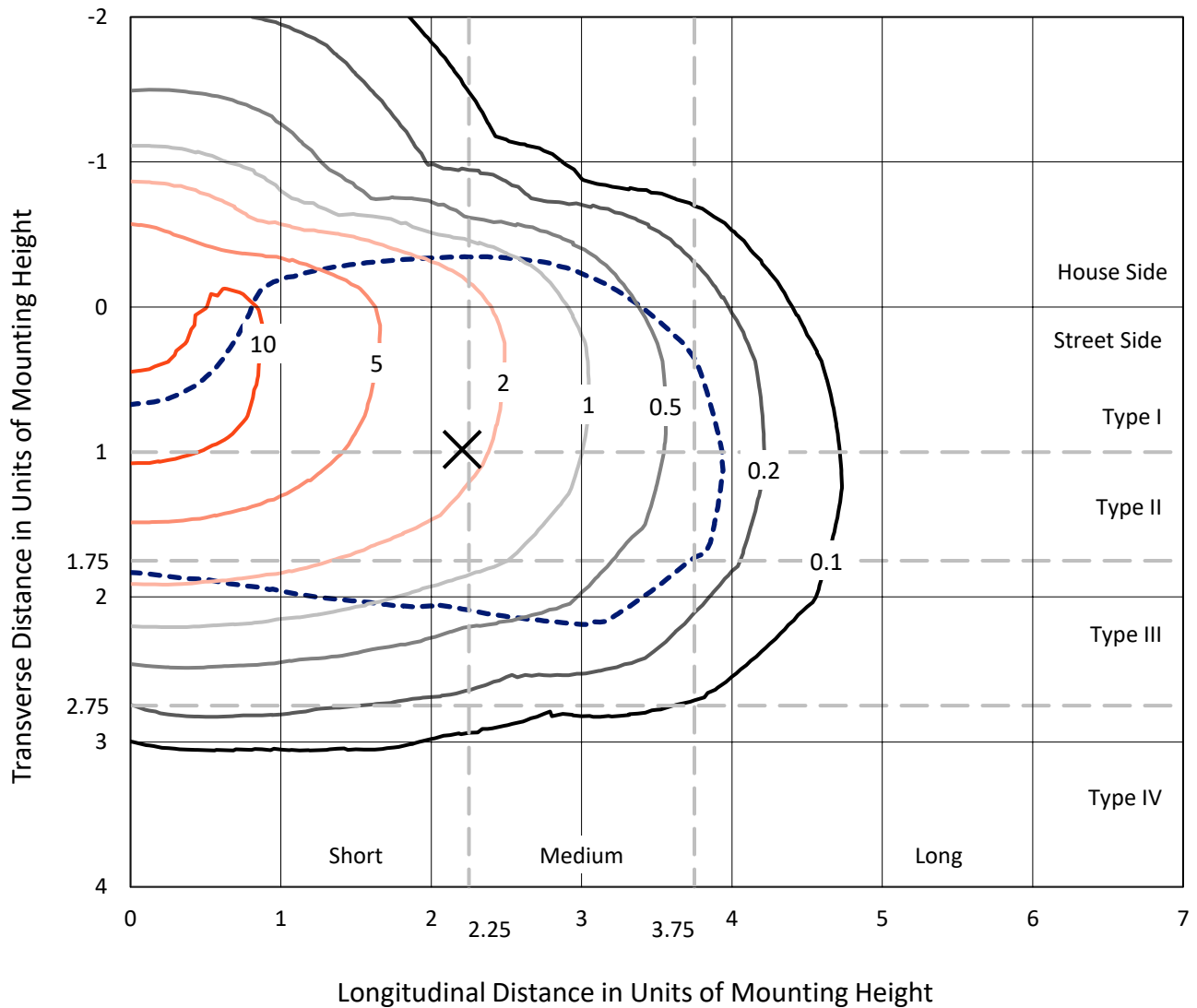
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

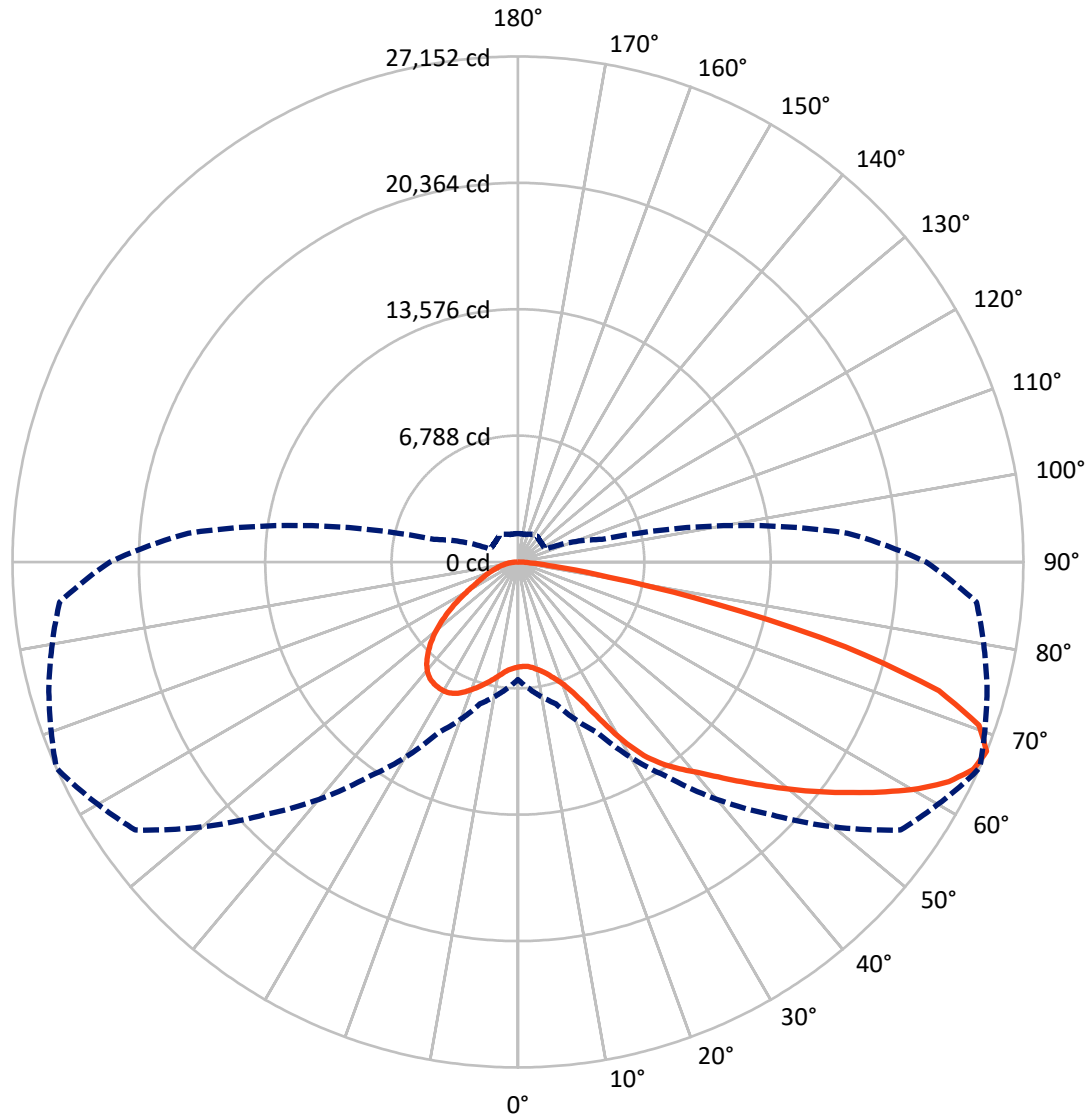
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc
 Type III - Short - N/A

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CATALOG NUMBER: NAV-SB5D-730-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12647.2	0.0	12647.2
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	38216.8	0.0	38216.8
	% Fixture	75.1	0.0	75.1
Total	Lumens	50864.0	0.0	50864.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	559.3	1.1
10°-20°	1848.0	3.6
20°-30°	3561.8	7.0
30°-40°	6245.2	12.3
40°-50°	9284.6	18.3
50°-60°	11769.1	23.1
60°-70°	11515.8	22.6
70°-80°	5493.1	10.8
80°-90°	587.1	1.2
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°	50864.0	100.0
0°-180°	50864.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884779

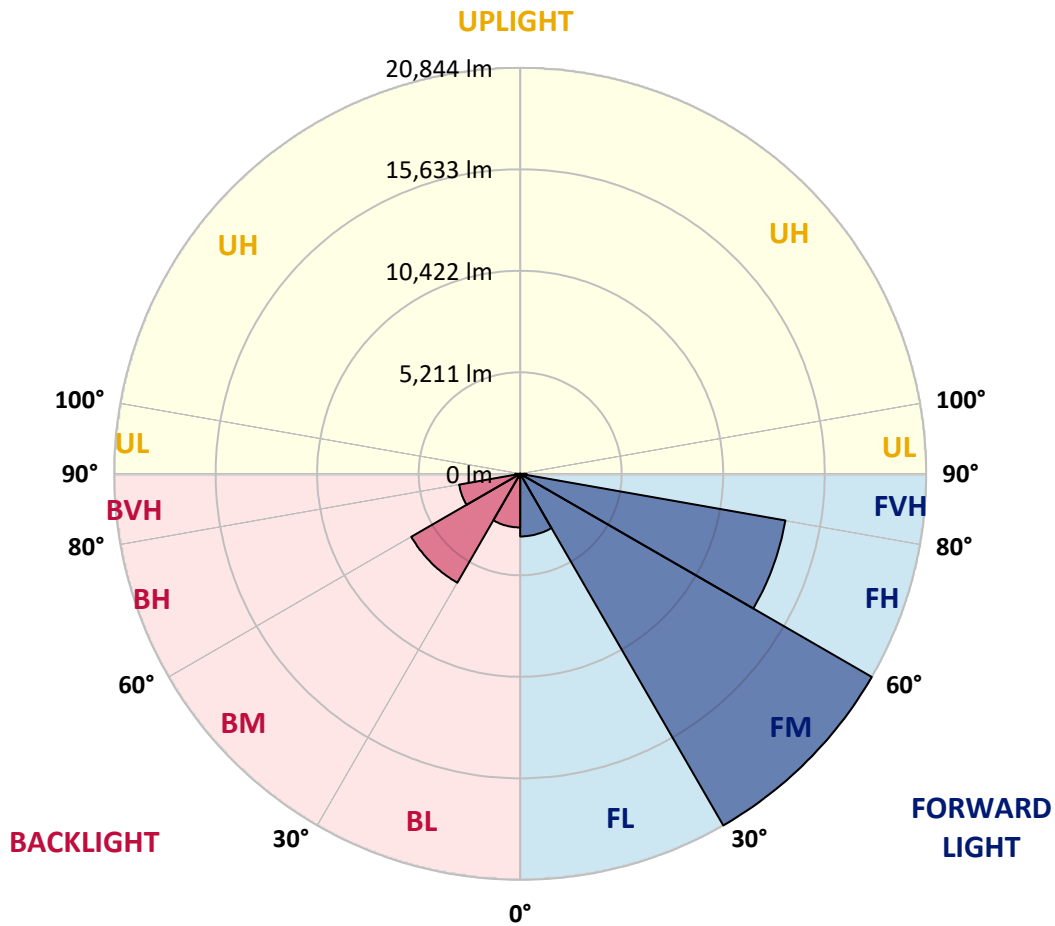
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3214.1	6.3			
FM (30°-60°)	20843.6	41.0			
FH (60°-80°)	13826.2	27.2			G5
FVH (80°-90°)	332.8	0.7			G3/500
BL (0°-30°)	2755.0	5.4	B4/5000		
BM (30°-60°)	6455.3	12.7	B4/8500		
BH (60°-80°)	3182.7	6.3	B4/5000		G4/5000
BVH (80°-90°)	254.2	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Short



REPORT NUMBER: P884779

CATALOG NUMBER: NAV-SB5D-730-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5
2.5°	5582.7	5614.8	5606.7	5593.4	5590.7	5596.1	5604.1	5612.1	5609.4	5622.8	5644.2
5°	5566.7	5598.7	5596.1	5596.1	5606.7	5628.1	5641.5	5654.9	5641.5	5657.5	5686.9
7.5°	5577.4	5601.4	5612.1	5622.8	5649.5	5689.6	5721.7	5751.1	5735.0	5753.7	5791.1
10°	5713.6	5732.4	5743.0	5743.0	5761.7	5807.2	5839.2	5892.7	5879.3	5908.7	5956.8
12.5°	5962.2	5980.9	5980.9	5970.2	5983.6	6013.0	6023.6	6082.4	6058.4	6106.5	6154.6
15°	6266.8	6304.3	6274.9	6256.1	6261.5	6290.9	6288.2	6333.6	6309.6	6349.7	6392.4
17.5°	6603.6	6651.7	6603.6	6600.9	6590.2	6622.3	6624.9	6665.0	6622.3	6651.7	6681.1
20°	7001.8	7068.6	7028.5	7041.8	7017.8	7031.2	7044.5	7103.3	7036.5	7057.9	7049.9
22.5°	7563.0	7643.1	7600.4	7651.2	7635.1	7624.4	7621.8	7726.0	7621.8	7629.8	7552.3
25°	8380.7	8476.9	8402.1	8471.6	8471.6	8506.3	8546.4	8680.0	8506.3	8455.6	8255.1
27.5°	9588.7	9684.9	9537.9	9580.6	9567.3	9652.8	9610.0	9941.4	9754.4	9671.5	9268.0
30°	11042.5	11213.5	10935.6	10924.9	10911.5	11047.8	11109.3	11328.4	11138.7	11055.8	10569.4
32.5°	12613.8	12792.9	12461.5	12365.3	12314.5	12397.4	12346.6	12523.0	12392.0	12263.8	11662.5
35°	14276.1	14452.5	14137.1	13950.1	13747.0	13573.2	13391.5	13437.0	13314.0	13118.9	12496.3
37.5°	15847.5	16170.8	15836.8	15636.4	15262.2	14922.8	14415.1	14203.9	14089.0	13910.0	13282.0
40°	17448.3	17632.7	17378.8	17207.7	16801.5	16269.7	15457.3	15011.0	14856.0	14682.3	14150.5
42.5°	18626.8	18803.2	18666.9	18549.3	18231.3	17614.0	16563.7	16005.2	15780.7	15585.6	15133.9
45°	19562.2	19693.1	19607.6	19650.3	19514.0	18915.4	17710.2	17071.5	16839.0	16601.1	16245.7
47.5°	19939.0	20077.9	20214.2	20468.1	20700.6	20259.7	18942.2	18225.9	17980.1	17736.9	17386.8
50°	19896.2	20037.8	20433.4	20973.2	21694.7	21547.8	20240.9	19455.3	19228.1	18950.2	18626.8
52.5°	19554.1	19714.5	20222.2	21120.2	22269.3	22512.5	21563.8	20724.7	20510.9	20179.5	19856.1
55°	18656.2	18752.4	19514.0	20786.1	22405.6	23186.0	22859.9	22076.9	21863.1	21400.8	21048.0
57.5°	16991.3	17130.2	18239.3	19885.5	22063.5	23642.9	23998.4	23498.6	23292.9	22627.4	22258.6
60°	14818.6	15040.4	16309.8	18372.9	21192.3	23640.3	25032.6	24896.3	24725.3	23835.4	23450.5
62.5°	12360.0	12616.5	13837.8	16235.0	19669.1	22969.5	25679.3	26066.8	25978.6	24949.8	24458.0
65°	9492.5	9668.8	10884.8	13469.0	17298.6	21529.1	25754.2	26865.9	26881.9	25796.9	24984.5
67.5°	6320.3	6828.0	7883.7	10107.1	14123.8	19174.7	25096.7	26996.8	27151.8	26088.2	24719.9
70°	3084.0	3752.1	4786.3	6568.8	10107.1	15564.2	23378.4	25922.5	26267.3	25238.4	23143.2
72.5°	1280.1	1496.6	2060.4	3241.7	5801.8	10502.6	19925.6	23009.6	23648.3	22362.9	19457.9
75°	863.2	935.3	1178.5	1662.2	2643.0	5179.2	14369.6	17157.0	18185.9	16889.7	13805.7
77.5°	665.4	710.9	857.8	1162.5	1571.4	1958.9	7691.2	10339.6	10871.4	10064.4	7183.5
80°	523.8	558.5	641.4	847.2	1114.4	1047.6	2621.6	4684.8	4992.1	4187.7	2309.0
82.5°	454.3	467.7	459.7	574.6	740.3	612.0	860.5	1729.1	1908.1	1384.3	753.6
85°	328.7	366.1	382.2	355.4	392.8	310.0	352.8	612.0	673.5	601.3	424.9
87.5°	133.6	197.8	243.2	229.8	144.3	88.2	109.6	179.1	205.8	224.5	139.0
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: P884779

CATALOG NUMBER: NAV-SB5D-730-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5	5641.5
2.5°	5646.8	5665.5	5678.9	5694.9	5705.6	5721.7	5753.7	5772.4	5775.1	5788.5	5785.8
5°	5697.6	5724.3	5753.7	5796.5	5844.6	5884.7	5946.1	5988.9	6004.9	6018.3	6015.6
7.5°	5807.2	5844.6	5898.0	5972.9	6042.4	6095.8	6170.6	6221.4	6272.2	6290.9	6293.6
10°	5970.2	6023.6	6101.1	6202.7	6277.5	6347.0	6424.5	6467.3	6518.0	6539.4	6550.1
12.5°	6173.3	6229.4	6331.0	6472.6	6542.1	6590.2	6616.9	6606.2	6616.9	6635.6	6641.0
15°	6405.8	6467.3	6582.2	6734.5	6782.6	6739.9	6681.1	6627.6	6619.6	6624.9	6643.6
17.5°	6681.1	6726.5	6860.1	6988.4	6953.7	6777.3	6649.0	6563.5	6520.7	6507.4	6526.1
20°	7065.9	7065.9	7175.5	7255.6	7023.1	6723.8	6523.4	6384.4	6296.2	6258.8	6250.8
22.5°	7533.6	7490.8	7560.3	7504.2	7009.8	6574.2	6296.2	6055.7	5922.1	5868.6	5860.6
25°	8126.8	8076.1	8057.4	7709.9	6913.6	6336.3	5884.7	5593.4	5475.8	5446.4	5451.7
27.5°	9022.1	8893.8	8650.6	7822.2	6737.2	5962.2	5403.6	5133.7	5066.9	5069.6	5077.6
30°	10214.0	9957.5	9361.5	7840.9	6448.6	5433.0	4911.9	4719.5	4687.4	4700.8	4746.2
32.5°	11317.7	11074.5	10088.4	7755.4	6004.9	4914.6	4471.0	4342.7	4294.6	4310.6	4332.0
35°	12183.6	12116.8	10761.9	7635.1	5459.8	4428.2	4075.4	3965.9	3872.3	3851.0	3867.0
37.5°	13001.3	12974.6	11266.9	7466.8	4919.9	4083.5	3757.4	3613.1	3476.8	3402.0	3404.7
40°	13899.3	13872.6	11598.3	7207.5	4441.6	3784.2	3471.5	3281.7	3113.4	2977.1	2990.4
42.5°	14909.5	14751.8	11756.0	6836.1	4035.4	3530.3	3239.0	2982.4	2760.6	2635.0	2643.0
45°	16013.2	15657.7	11753.3	6363.0	3693.3	3297.8	2990.4	2627.0	2421.2	2303.6	2298.3
47.5°	17183.7	16523.6	11609.0	5839.2	3361.9	3041.2	2605.6	2327.7	2191.4	2119.2	2103.2
50°	18391.6	17333.4	11363.2	5238.0	3022.5	2749.9	2365.1	2175.4	2071.1	2004.3	1980.3
52.5°	19527.4	18068.3	11066.5	4556.5	2677.8	2466.6	2258.2	2111.2	2001.6	1926.8	1894.7
55°	20583.0	18701.6	10646.9	3859.0	2397.2	2276.9	2207.4	2084.5	1958.9	1870.7	1836.0
57.5°	21521.0	19113.2	9922.7	3204.2	2196.7	2146.0	2154.0	2039.1	1894.7	1819.9	1771.8
60°	22301.4	19415.2	8851.1	2597.6	2033.7	2017.7	2071.1	1953.5	1785.2	1699.7	1662.2
62.5°	22769.1	19409.8	7536.2	2127.3	1894.7	1900.1	1961.6	1846.6	1675.6	1595.4	1571.4
65°	22729.0	18934.1	6093.1	1819.9	1761.1	1766.5	1846.6	1729.1	1584.7	1536.6	1534.0
67.5°	21924.6	17774.3	4674.1	1619.5	1614.1	1638.2	1731.7	1648.9	1528.6	1523.3	1531.3
70°	19746.6	15366.4	3367.3	1459.1	1461.8	1496.6	1619.5	1598.1	1499.2	1509.9	1507.2
72.5°	15834.1	11715.9	2260.9	1290.8	1293.5	1349.6	1512.6	1558.0	1469.8	1611.5	1632.9
75°	10545.4	7306.4	1453.8	1111.7	1114.4	1186.6	1419.1	1480.5	1389.7	1606.1	1619.5
77.5°	5066.9	3284.4	1052.9	935.3	935.3	1002.2	1226.6	1325.5	1183.9	1248.0	1143.8
80°	1750.4	1234.7	828.5	753.6	737.6	783.0	1034.2	1149.1	1020.9	940.7	881.9
82.5°	689.5	641.4	665.4	585.3	531.8	561.2	804.4	948.7	751.0	678.8	676.1
85°	395.5	416.9	470.3	387.5	307.3	344.7	590.6	681.5	566.6	499.7	510.4
87.5°	106.9	147.0	216.5	200.4	139.0	147.0	280.6	376.8	326.0	251.2	259.2
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)