

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: McGRAW-EDISON

Report Number: P833691

Luminaire Tested: **TTN-D2-830-U-RW-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833691
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D2-830-U-RW-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5360.7 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

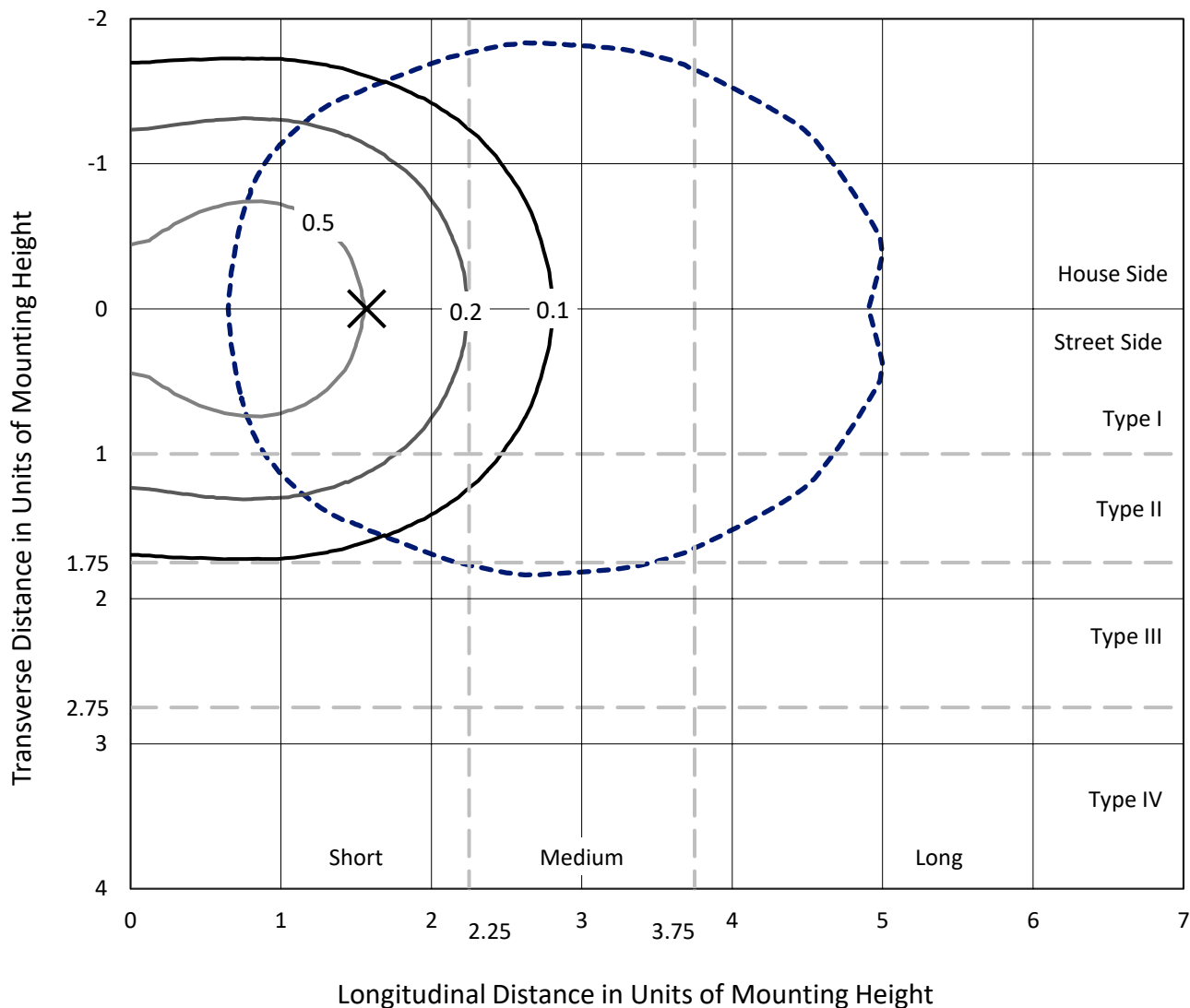
Input Watts (W): 49.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

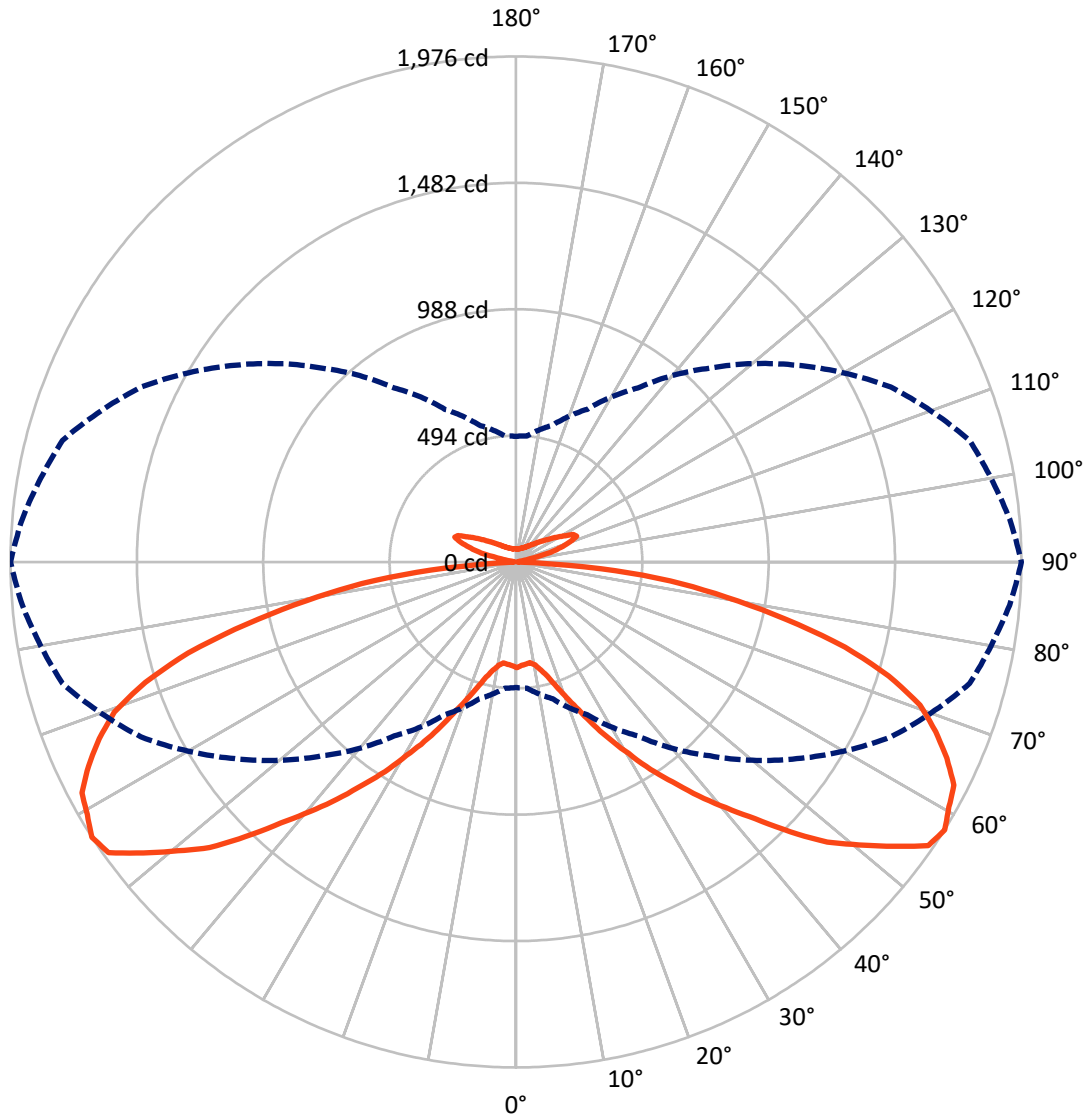
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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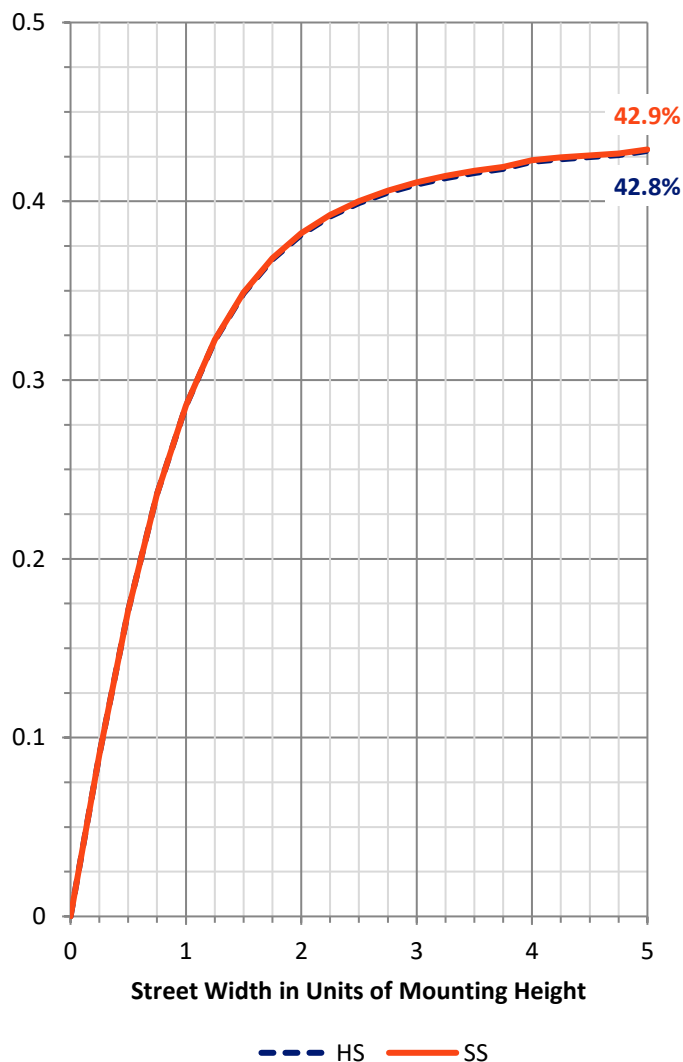
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2310.0	370.3	2680.4
	% Fixture	43.1	6.9	50.0
Street Side	Lumens	2310.0	370.3	2680.4
	% Fixture	43.1	6.9	50.0
Total	Lumens	4620.0	740.7	5360.7
	% Fixture	86.2	13.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.7
10°-20°	123.9	2.3
20°-30°	258.4	4.8
30°-40°	463.5	8.6
40°-50°	740.6	13.8
50°-60°	1013.9	18.9
60°-70°	1045.8	19.5
70°-80°	743.8	13.9
80°-90°	191.4	3.6
90°-100°	16.5	0.3
100°-110°	168.0	3.1
110°-120°	245.6	4.6
120°-130°	142.5	2.7
130°-140°	75.5	1.4
140°-150°	44.9	0.8
150°-160°	27.6	0.5
160°-170°	15.1	0.3
170°-180°	4.9	0.1
0°-90°	4620.0	86.2
0°-180°	5360.7	100.0

Coefficient of Utilization



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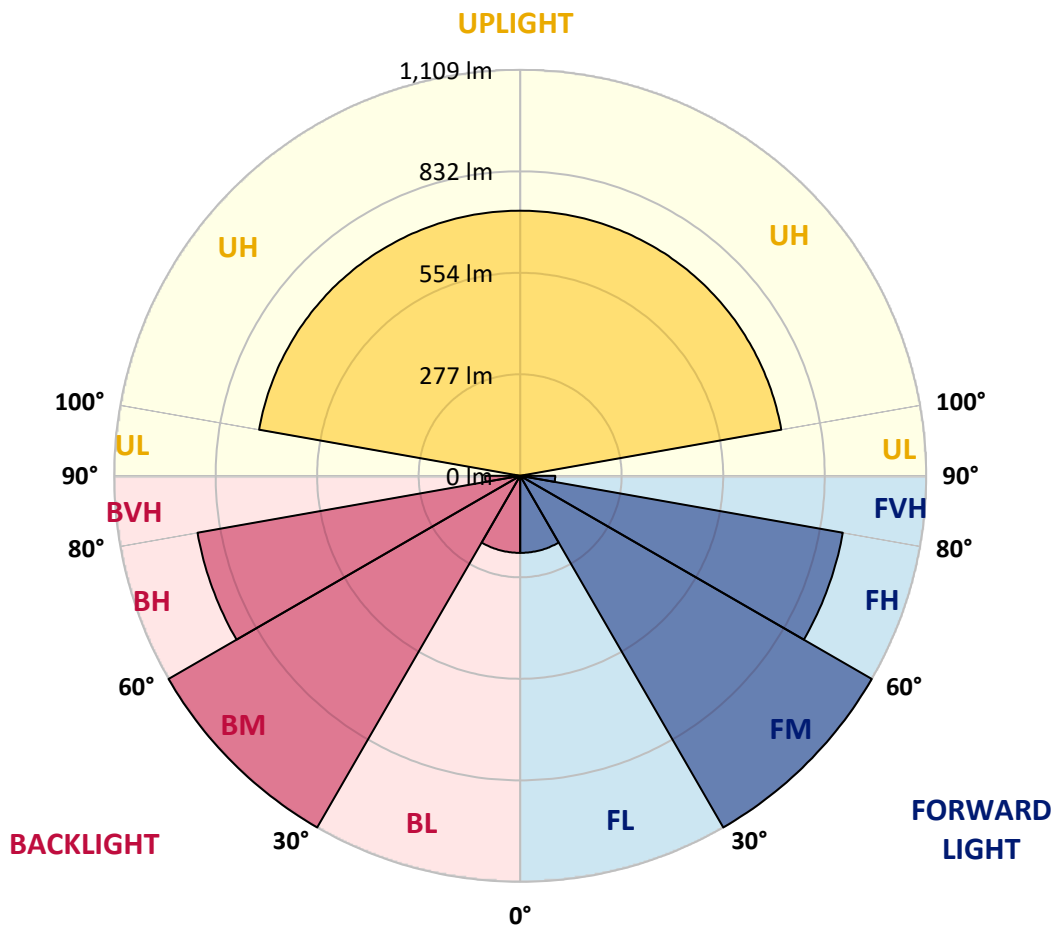
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	210.5	3.9			
FM (30°-60°)	1109.0	20.7			
FH (60°-80°)	894.8	16.7			G1/1800
FVH (80°-90°)	95.7	1.8			G1/100
BL (0°-30°)	210.5	3.9	B1/500		
BM (30°-60°)	1109.0	20.7	B2/2500		
BH (60°-80°)	894.8	16.7	B2/1000		G2/1000
BVH (80°-90°)	95.7	1.8			G1/100
UL (90°-100°)	16.5	0.3		U2/50	
UH (100°-180°)	724.2	13.5		U4/1000	

BUG Rating: B2-U4-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2
2.5°	413.2	413.2	409.3	409.3	409.3	405.4	405.4	405.4	405.4	401.5	405.4
5°	413.2	413.2	413.2	413.2	409.3	405.4	405.4	405.4	401.5	401.5	401.5
7.5°	409.3	409.3	409.3	409.3	405.4	401.5	401.5	401.5	397.6	397.6	397.6
10°	405.4	409.3	405.4	405.4	401.5	401.5	405.4	405.4	409.3	409.3	409.3
12.5°	401.5	401.5	401.5	405.4	405.4	409.3	417.1	424.9	428.8	432.7	432.7
15°	401.5	401.5	405.4	409.3	417.1	424.9	436.6	448.3	456.1	463.9	463.9
17.5°	401.5	401.5	405.4	417.1	428.8	444.4	463.9	479.5	495.0	506.7	510.6
20°	401.5	401.5	409.3	424.9	448.3	471.7	498.9	522.3	545.7	565.2	565.2
22.5°	405.4	409.3	417.1	436.6	471.7	506.7	541.8	576.9	604.2	627.6	627.6
25°	413.2	413.2	424.9	456.1	498.9	545.7	596.4	639.3	674.4	705.5	705.5
27.5°	417.1	421.0	436.6	475.6	530.1	588.6	658.8	709.4	756.2	783.5	787.4
30°	424.9	428.8	452.2	491.1	557.4	631.5	713.3	783.5	834.2	861.5	869.3
32.5°	428.8	432.7	463.9	510.6	584.7	670.5	764.0	853.7	923.8	955.0	966.7
35°	440.5	444.4	475.6	530.1	615.9	713.3	822.5	927.7	1009.6	1048.6	1056.4
37.5°	452.2	456.1	487.2	549.6	647.1	760.1	884.8	1005.7	1099.2	1146.0	1161.6
40°	460.0	463.9	498.9	573.0	682.1	810.8	955.0	1087.5	1192.8	1251.3	1263.0
42.5°	471.7	475.6	514.5	592.5	713.3	861.5	1029.1	1177.2	1290.2	1356.5	1372.1
45°	483.4	487.2	530.1	615.9	748.4	916.0	1103.1	1282.4	1411.1	1489.0	1504.6
47.5°	495.0	498.9	545.7	639.3	783.5	970.6	1181.1	1376.0	1531.9	1606.0	1637.2
50°	498.9	506.7	553.5	654.9	806.9	1017.4	1247.4	1469.5	1633.3	1730.7	1738.5
52.5°	502.8	510.6	561.3	666.6	826.4	1052.5	1301.9	1547.5	1738.5	1855.4	1847.7
55°	506.7	506.7	561.3	666.6	834.2	1075.8	1340.9	1598.2	1808.7	1902.2	1956.8
57.5°	491.1	495.0	553.5	658.8	830.3	1071.9	1340.9	1617.7	1836.0	1937.3	1976.3
60°	471.7	479.5	534.0	639.3	814.7	1060.3	1333.1	1609.9	1847.7	1956.8	1945.1
62.5°	444.4	460.0	506.7	612.0	791.3	1033.0	1321.4	1590.4	1820.4	1933.4	1921.7
65°	413.2	428.8	471.7	584.7	740.6	966.7	1259.1	1551.4	1746.3	1874.9	1851.5
67.5°	382.0	393.7	436.6	537.9	682.1	896.5	1177.2	1465.6	1641.1	1781.4	1769.7
70°	346.9	350.8	393.7	483.4	623.7	826.4	1099.2	1344.8	1547.5	1652.8	1676.1
72.5°	304.0	304.0	346.9	424.9	553.5	732.8	994.0	1208.4	1399.4	1489.0	1524.1
75°	249.5	253.4	288.5	358.6	463.9	627.6	845.9	1064.2	1224.0	1317.5	1329.2
77.5°	194.9	198.8	226.1	284.6	374.2	506.7	697.7	869.3	1021.3	1103.1	1079.7
80°	140.3	144.2	163.7	206.6	276.8	378.1	537.9	689.9	799.1	865.4	834.2
82.5°	85.8	89.7	101.3	128.6	175.4	245.6	366.4	479.5	565.2	619.8	608.1
85°	42.9	42.9	50.7	58.5	74.1	109.1	175.4	241.7	307.9	346.9	335.2
87.5°	7.8	11.7	11.7	11.7	11.7	7.8	11.7	11.7	11.7	19.5	7.8
90°	6.3	6.3	7.6	7.6	7.6	7.6	7.6	7.6	7.6	6.3	6.3
92.5°	6.3	6.3	6.3	8.9	10.1	8.9	10.1	7.6	7.6	6.3	6.3
95°	7.6	7.6	8.9	11.4	13.9	15.2	15.2	8.9	8.9	7.6	7.6
97.5°	10.1	11.4	11.4	13.9	22.8	41.8	25.3	12.7	12.7	11.4	10.1
100°	16.5	17.7	17.7	31.7	67.2	90.0	64.6	32.9	24.1	17.7	17.7
102.5°	53.2	55.8	68.4	102.6	152.1	138.1	116.6	110.2	76.0	60.8	58.3
105°	135.6	134.3	144.5	171.1	212.9	209.1	192.6	174.9	150.8	139.4	139.4
107.5°	178.7	178.7	187.5	210.4	242.0	282.6	286.4	226.8	198.9	186.3	185.0
110°	201.5	201.5	209.1	228.1	269.9	326.9	324.4	280.0	245.8	229.4	226.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	206.5	207.8	218.0	247.1	292.7	318.1	306.7	288.9	273.7	261.0	258.5
115°	214.2	214.2	225.6	253.4	278.8	288.9	276.2	262.3	252.2	247.1	249.6
117.5°	211.6	215.4	218.0	233.2	249.6	257.2	250.9	231.9	224.3	221.8	218.0
120°	196.4	196.4	198.9	206.5	215.4	219.2	216.7	204.0	197.7	196.4	193.9
122.5°	174.9	176.1	174.9	178.7	185.0	188.8	186.3	176.1	173.6	173.6	171.1
125°	153.3	153.3	152.1	154.6	158.4	157.1	158.4	153.3	152.1	152.1	150.8
127.5°	138.1	136.9	134.3	135.6	136.9	136.9	138.1	133.1	134.3	135.6	134.3
130°	122.9	122.9	120.4	120.4	120.4	117.8	120.4	117.8	119.1	120.4	121.6
132.5°	109.0	109.0	105.2	103.9	103.9	103.9	105.2	103.9	106.4	109.0	109.0
135°	97.6	97.6	93.8	95.0	95.0	93.8	95.0	93.8	96.3	97.6	97.6
137.5°	88.7	88.7	86.2	86.2	86.2	84.9	86.2	86.2	87.4	90.0	91.2
140°	81.1	81.1	79.8	79.8	78.6	79.8	79.8	79.8	81.1	82.4	82.4
142.5°	77.3	76.0	74.8	73.5	74.8	74.8	74.8	73.5	74.8	77.3	77.3
145°	71.0	71.0	69.7	69.7	69.7	71.0	69.7	69.7	71.0	71.0	72.2
147.5°	67.2	67.2	65.9	67.2	67.2	67.2	67.2	65.9	67.2	67.2	68.4
150°	65.9	64.6	63.4	64.6	64.6	63.4	63.4	63.4	63.4	64.6	64.6
152.5°	62.1	62.1	60.8	62.1	60.8	60.8	60.8	60.8	60.8	62.1	63.4
155°	59.6	59.6	58.3	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
157.5°	57.0	58.3	57.0	57.0	57.0	57.0	57.0	57.0	57.0	58.3	58.3
160°	55.8	55.8	55.8	55.8	54.5	54.5	54.5	55.8	55.8	55.8	57.0
162.5°	54.5	54.5	54.5	54.5	53.2	53.2	53.2	53.2	54.5	54.5	55.8
165°	54.5	53.2	53.2	53.2	52.0	52.0	52.0	52.0	53.2	54.5	53.2
167.5°	52.0	52.0	52.0	52.0	52.0	50.7	50.7	52.0	52.0	52.0	53.2
170°	52.0	52.0	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	52.0
172.5°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	50.7	50.7	52.0	52.0
175°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	52.0	52.0	52.0	50.7
177.5°	52.0	52.0	52.0	52.0	50.7	52.0	52.0	52.0	52.0	52.0	52.0
180°	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0

(END OF REPORT)